BLUE SEAL®

E9311 CONVECTION OVEN RANGE

SERVICE MANUAL

turbofan®

Convection Oven

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Revision 4/F3544

⚠ **<u>WARNING:</u> ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

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This manual is designed to take a more in depth look at the E9311 convection oven range for the purpose of making the unit more understandable to service people.

There are settings explained in this manual that should never require to be adjusted, but for completeness and those special cases where these settings are required to change, this manual gives a full explanation as to how, and what effects will result.

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IMPORTANT: MAKING ALTERATIONS MAY VOID WARRANTIES AND APPROVALS.

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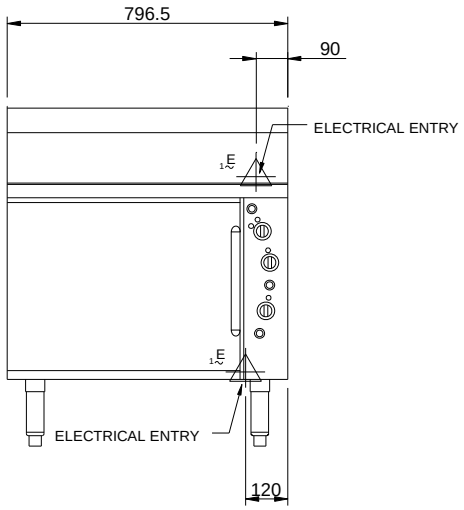
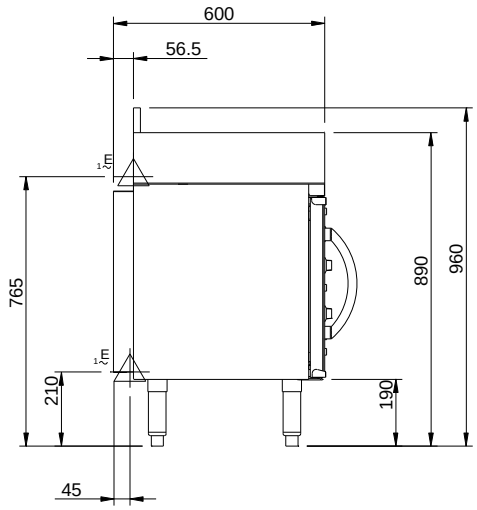
1. SPECIFICATIONS

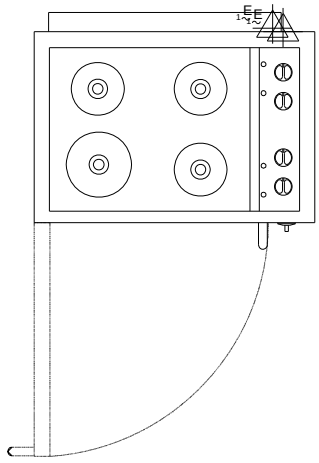
MODEL: E9311



FRONT



SIDE



PLAN

LEGEND

- Electrical connection entry point

Dimensions shown in millimetres.
Dimensions in inches shown in brackets.

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LOCATION
To ensure correct ventilation for the motor and controls the following minimum installation clearances are to be adhered to:

Rear	25mm / 1”
Left-hand side	75mm / 3”
Right-hand side	25mm / 1”

OVEN INTERNAL DIMENSIONS

Width	544 mm / 21.4”
Height	418 mm / 16.5”
Depth	432 mm / 17”
Oven Volume	0.10 m^3 / 3.5 ft^3

OVEN RACK SIZE

Width	536 mm / 21”
Depth:	370 mm / 14.5”

ELECTRICAL SUPPLY SPECIFICATION

Oven
230-240 V AC, 50 Hz, 13.0 A, 3.1kW @ 240 V

Hob
230-240 V AC, 50 Hz, 27.0 A, 6.5kW @ 240 V

ELECTRICAL PLUG SPECIFICATION REQUIREMENTS (OVEN)

Australia	3-pin 250V 15A, AS/NZ 3112
Canada	3-pin 250V 15A, NEMA 6-15
New Zealand	3-pin 250V 15A, AS/NZ 3112
United Kingdom	3-pin 250V 13A fused, BS 1363A
United States	3-pin 250V 15A, NEMA 6-15
Other Countries	3-pin 250V 13A minimum, type to meet country standards

ELECTRICAL CONNECTION WIRE CONDUCTOR SIZES (HOB)

Minimum:	4mm^2 / 16AWG

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2. INSTALLATION

⚠ **WARNING: THIS APPLIANCE MUST BE GROUNDED.**

⚠ **WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

It is most important that the oven is installed correctly and that the operation is correct before use. Installation shall comply with local electrical, health and safety requirements.

BEFORE CONNECTION TO POWER SUPPLY

Unpack and check unit for damage and report any damage to the carrier and dealer. Report any deficiencies to your dealer. Fit the legs which are packed inside the oven. Fit door handle to oven door. Check that the available power supply is correct to that shown on the rating plate located on the right-hand side panel (figure 2.3).

Oven

230-240 V AC, 50 Hz, 13.0 A, 3.1kW @ 240 V

Hob

230-240 V AC, 50 Hz, 13.0 A, 6.5kW @ 240 V

⚠ **WARNING: THIS APPLIANCE HAS INDEPENDENT ELECTRICAL CIRCUITS FOR THE OVEN AND HOB. SEPARATE POWER CONNECTIONS ARE REQUIRED.**

LOCATION

To ensure correct ventilation for the motor, and controls the following minimum installation clearances are to be adhered to:

Rear	25mm / 1”
Left-hand side	25mm / 1”
Right-hand side	25mm / 1”

IMPORTANT: THE OVEN VENT LOCATED ON THE CABINET TOP MUST NEVER BE OBSTRUCTED.

Position the oven in its allocated working position. Use a spirit level to ensure the oven is level from side to side and front to back. (If this is not carried out, uneven cooking could occur). The feet/legs used with bench or floor mounting are adjustable and will require adjusting in levelling the unit. It should be positioned so the operating panel and oven shelves are easily reachable for loading and unloading.

BEFORE USE

Operate the oven for about 1 hour at 200°C (400°F) to remove any fumes or odours which may be present. Operate the element on HI for about three minutes. This will produce some smoke which will soon disappear.

ELECTRICAL CONNECTION—OVEN

E9311 convection ovens are supplied with pre-fitted cords. Ensure unit is fitted with the correct cord and plug for the installation. Refer specifications section.

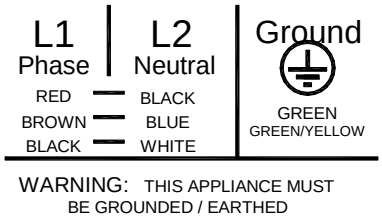


Figure 2.1

Should changing of the cord be necessary, gain access to the electrical connection terminal block and strain relief by removing the back panel (four screws).

ELECTRICAL CONNECTION—HOB

To access the electrical connection terminal block, remove the back panel of the hob (six screws).

DOOR HANDLE INSTALLATION

1) Open oven door.
2) Remove two screws (item 2).
3) Remove the two screws (item 3) from the handle (item 1).
4) Install the handle bracket through the slot on the door side.
5) Screw in the two screws (item 2) fully, then fully screw in the previous two screws (item 3). Ensure that they are tight.

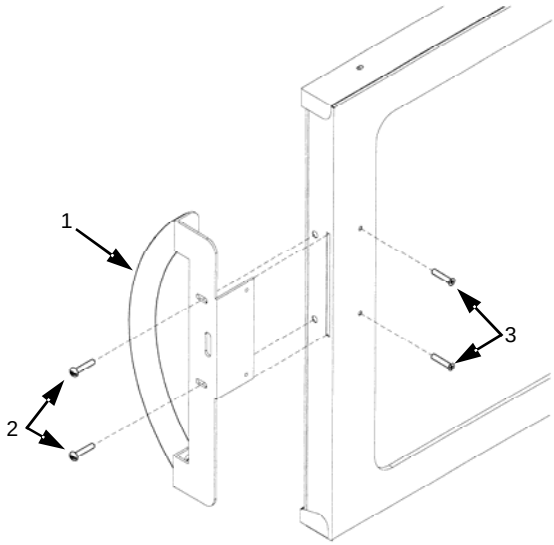


Figure 2.2

RATING PLATE LOCATION

The rating plate for the oven is located at the bottom left corner of the RH side panel.

Figure 2.3

The rating plate for the hob is located on the left side of the hob back panel.

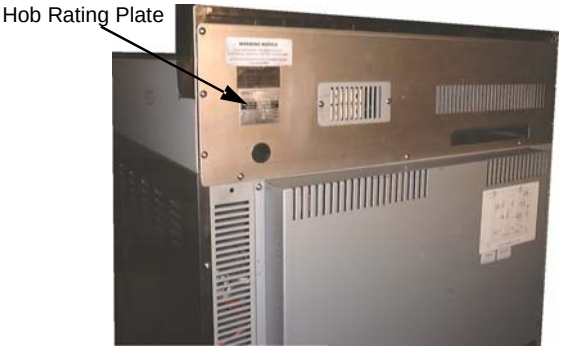
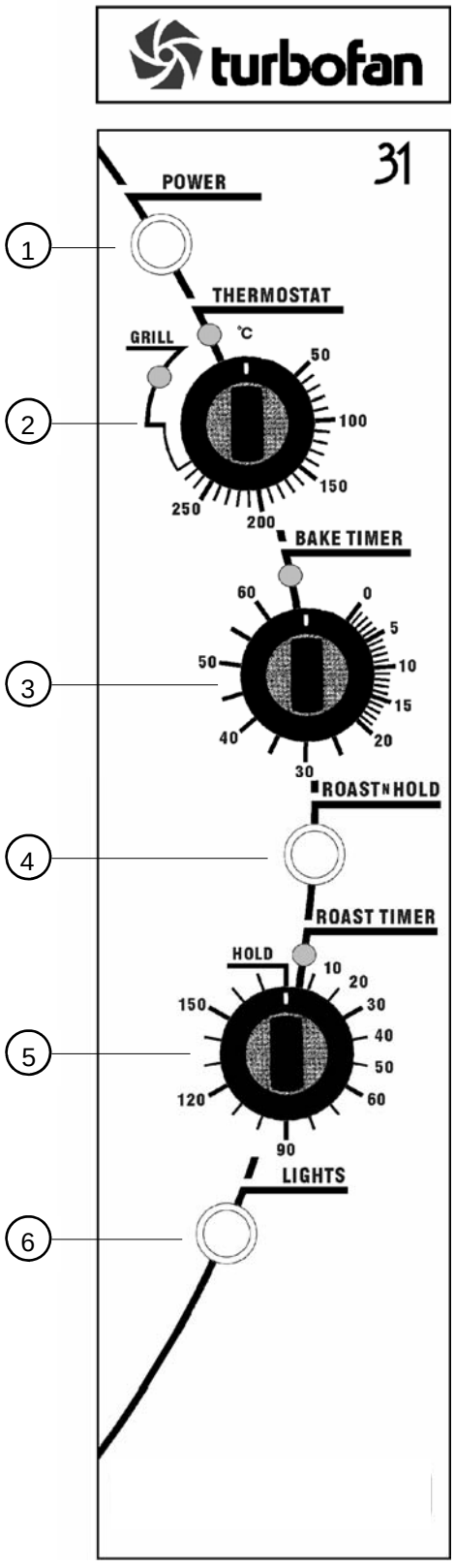


Figure 2.4

3. OPERATION

NOTE: A full user's operation manual is supplied with the product and can be used for further referencing of installation, operation and service.

3.1 OVEN



1. POWER

Depress to switch power on or off (switch illuminates when power is on).

2. THERMOSTAT

Temperature range 50 - 280°C (120 - 550°F). Indicator illuminates when elements are cycling ON to maintain set temperature.

GRILL POSITION - The GRILL indicator will illuminate indicating that the GRILL function has been set. The HEATING indicator will also illuminate whenever the elements are on.

3. BAKE TIMER

1 Hour bake timer.
(Indicator illuminates when "time up" (0) reached, and buzzer sounds).

4. ROAST N HOLD

Depress switch to activate 'ROAST N HOLD' function (Switch illuminates when ON).

5. ROAST TIMER

3 Hour roast timer.
(Indicator illuminates when "time up" (0) reached, and product held at 75°C (167°F).

6. LIGHT SWITCH

Push switch to activate oven light.
(Light illuminates while button depressed).

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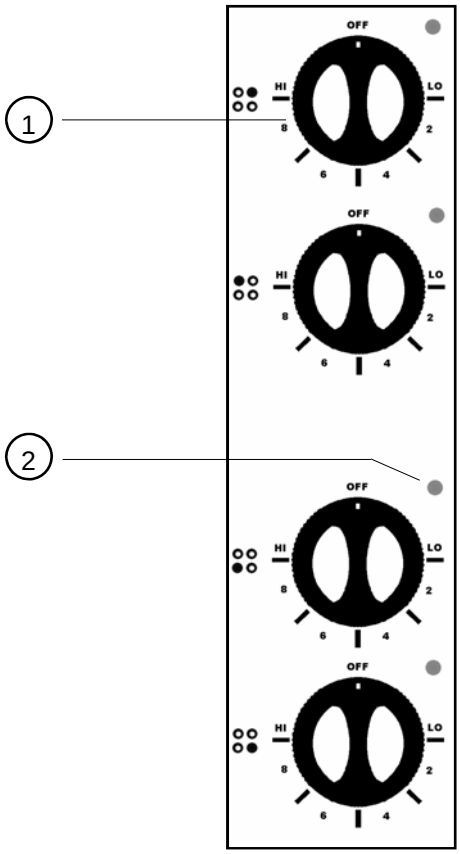
3.2 COOK TOP (HOB)

IMPORTANT: DO NOT PLACE HOT COOKING VESSELS ON CONTROL AREA.



1. ELEMENT CONTROL

Each control knob can be turned in either direction and set to provide any level of heating between HI and LO. Start cooking at the highest setting, and change to a lower setting when the desired temperature has been reached. Disc elements have the ability to store heat, so cooking is able to continue for a time after the element has been switched off.

2. INDICATOR LIGHTS

An indicator light is provided for each element and will illuminate whenever the element is switched on.

DISC ELEMENTS

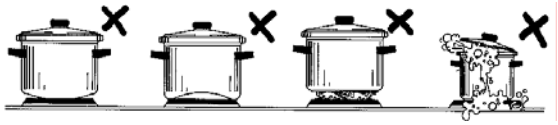
Before using for the first time, heat the element on HI for three minutes. This will produce some smoke which will soon disappear. With continued use the "red spot" and stainless steel trim ring may discolour. This is a natural result of heat and does not affect the operation of the element.

UTENSILS

To conserve power and achieve the best cooking results, saucepans should have close fitting lids and heavy duty flat bases which remain flat when heated.

Do not use woks, very small saucepans or those with buckled or bowed bases, as this could waste power, lengthen the cooking time, shorten the life of the element, and make cleaning difficult.

Flat, heavy duty base



Convex base -heat loss | Concave base -heat loss | Wet base -corrosion | Too small -corrosion -heat loss

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3.3 EXPLANATION OF CONTROL SYSTEM

The E9311 Turbofan convection oven range features multi-function operator controls for which a correct understanding of their operation is required before carrying out any service or fault repair work. The control device functions are explained as follows. These are broken into separate sections for the oven and hob.

Convection Oven

The oven is electrically independent of the hob, and has it's own electrical supply and connection.

A power switch on the control panel isolates all power to the controls of the oven. With the power switch Off all functions of the oven are inoperable.

NOTE: The supply voltage is fed directly to the input side of the power relay whenever the electrical supply is on.

With the power switch On (illuminated) power is directly supplied to the 60 minute bake timer, door microswitch, light switch, and the hold switch circuit. (On units manufacture prior to serial number 232053 power is also supplied directly to the temperature control circuit). Accordingly the oven circulation fan will operate when the door is closed, and with door open the oven light will come on and the circulation fan will shut down, as these are controlled via the door microswitch. The control panel light switch will turn the oven light on when the door is closed only when the light switch is held in.

The 60 minute timer is a mechanical timer and can therefore be operated with the oven's power switch On or Off. However, only with the oven's power switch On will the switch contacts of the 60 minute timer turn on the time-up buzzer and illuminate the time-up indicator on the control panel. The buzzer and time-up indicator provide indication that the time setting has run down to zero and at this point will remain On continuously until the 60 minute timer has been manually set back to the Off (vertical) position. The 60 minute timer does not control any other part of the oven's operating system as this timer is independent of the temperature control and heating system.

For units manufactured from serial number 232054, power to the temperature control circuit and elements is supplied via a power relay located near the terminal block at the rear of the unit. Although the power relay has two poles with changeover contacts, only the normally closed contact on one pole is used - the other is redundant. When the power switch on the control panel is switched on the power relay is energised and the normally open contact is closed, providing power to the temperature control circuit.

The temperature control of this oven is with a capillary type thermostat which can be set to a required cooking temperature, or set to the Grill/Broil position to provide top browning or grilling/broiling in the oven.

The thermostat switch has a separate switch body assembled onto the front from the shaft assembly and when the thermostat is set to a cooking temperature, one set of contacts is closed to switch power from the oven thermostat to the bottom heating element in the oven. The second switch contact of this switch assembly remains open in this setting and isolates power from the top element inner coil. The top element outer coil is directly switched on from the oven thermostat. Accordingly only the top outer element and the bottom element are used when a cooking temperature is selected. The control panel indicator light above the thermostat knob cycles On and Off with the thermostat to indicate when the elements are on and the oven is heating.

When the thermostat control is set to the Grill position the first switch contact opens and the second switch contact closes. This arrangement allows power to be provided to the top element inner coil when the thermostat is On, and isolates power from going to the bottom heating element. The top element outer coil which is directly fed from the oven thermostat switch is therefore On in conjunction with the top element inner coil when the thermostat is set to the Grill position. As both the top inner and outer element coils are thermostatically controlled, the elements will cycle On/Off with the door closed as the thermostat setting in the Grill position is 300°C (600°F). If the Grill position is selected with the door open, the elements will remain On continuously and the circulation fan will be turned Off. The control panel Grill indicator will illuminate when the thermostat is set to the Grill position and will cycle On and Off with the main heating indicator light.

The E311 Turbofan convection oven features a Roast-and-Hold system which can be used to automatically set the oven to a fixed holding

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temperature at the end of a timed cooking period.

From serial number 232054: When the Roast-and-Hold switch is turned On the switch will illuminate and turn on a relay found on the inside of the control panel. (This relay has two poles with changeover contacts, but only one pole is used). When this relay is switched On the normally closed contact opens, isolating the normal power supply to the oven thermostat and the normally open contact closes supplying power to the 3 hour roast timer.

To serial number 232053: When the Roast-and-Hold switch is turned On the switch will illuminate and turn on a mini-contactor found on the inside of the control panel. When this relay is switched On a normally closed switch pole on the contactor is open and the normal power supply to the oven thermostat is isolated. A second normally open switch pole is closed and this provides power to the 3 hour roast timer.

If the roast timer is in the Hold (vertical) position the timer switch contacts will be in their normally closed position and supply power directly to the Hold thermostat located behind the control panel. The Hold thermostat is factory set to 75°C (167°F) and will directly supply power to the bottom heating element as required to maintain its preset temperature.

If the main thermostat is turned On, power will also be supplied to the top outer element coil through the first switch contact of the thermostat front switch assembly. In this case the thermostat heating light will also cycle On/Off as the Hold thermostat maintains temperature.

In the Roast-and Hold mode the 3 hour timer can be set to a selected roasting time. During this time period the normally open switch contacts of the timer are closed. The timer has two change over switches and in this position one is used to supply power to its timing motor and the other is used to switch power directly to the main oven thermostat. During the 3 hour timer run-down period the oven temperature will be controlled by the main oven thermostat to the set temperature and operate as previously described.

When the 3 hour timer has run down and reached the Hold position the two switch contacts change over to their normally closed position which isolates power from the timer motor and the oven thermostat. It also switches power back to the oven hold thermostat. At this point the temperature control is now maintained by the hold thermostat as previously described. To cancel the hold circuit the Roast-and-Hold switch is turned Off. This turns off the contactor which removes power from the 3 hour timer and closes the contactor pole on the contactor that feeds the main oven thermostat.

The factory preset hold thermostat can be adjusted as required to change the holding temperature if necessary. Refer Service section for this procedure.

Hob

The hob is electrically independent of the oven and has it's own electrical supply and connection.

Four electric hot-plate elements are provided, one being 2000 Watts, and the other three being 1500 Watts.

Each element has three internal heating wire coils which are all switched together from the control energy regulator. Normally all three heating wires in the element will be on together whenever the control calls for heat. However if the element hot-plate temperature rises above a pre-set limit, an internal temperature limiter switch will turn off one of these heating wires to prevent the hot-plate overheating. This situation is normally created through HI heat settings without pans on the hot-plate or unsuitable pan bases being used (refer Operation Section). The limit switch will automatically cut in and out to prevent the element from overheating.

Each element is controlled by an energy regulator that switches the element off in the OFF position, turns the element on continuously in the HI position, and in between cycles the element on/off to create different heat control.

The control indicator light will be illuminated whenever a heat setting is selected to indicate that the element is operating. It does not cycle on/off with the element on/off cycling.

The Troubleshooting Guide should be used to identify any incorrect oven operation. On correct identification of the operating fault the Troubleshooting Guide will make reference to the corrective action required, or refer to the Fault Diagnosis section and/or Service section to assist in correction of the fault.

4. MAINTENANCE

⚠ **WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

4.1 CLEANING

⚠ **WARNING: ALWAYS TURN THE POWER SUPPLY OFF BEFORE CLEANING.**

IMPORTANT: THIS UNIT IS NOT WATER PROOF.
DO NOT USE A WATER JET SPRAY TO CLEAN INTERIOR OR EXTERIOR OF THIS UNIT.

EXTERIOR

Clean with a good quality stainless steel cleaning compound. Harsh abrasive cleaners may damage the surface.

INTERIOR

Ensure that the oven chamber is cool. Do not use wire brushes, steel wool or other abrasive materials. Clean the oven regularly with a good quality oven cleaner. Take care not to damage the fan or the tube at the right side of the oven which controls the thermostat.

OVEN RACKS

To remove, slide out to the stop position, raise the front edge up, and lift out.

SIDE RACKS

Undo the thumbscrew (anti-clockwise rotation) securing rack to oven wall, swing rack towards centre of oven to disengage location pin at front of side, and pull rack forward to remove. To replace, engage rack in rear holes, swing towards side of oven to engage in front hole, and replace thumbscrew.

FAN BAFFLE

To remove, unscrew the oven lamp glass and lift the baffle out. To replace, locate the bottom edge of the baffle over the bottom element terminal plate and secure in place with the oven lamp glass.

IMPORTANT: DO NOT OVER TIGHTEN LAMP GLASS.

OVEN SEALS

To remove, hold at their centre point and pull forward until they unclip. Remove side seals first, then top and bottom. The seals may be washed in the sink, but take care not to cut or damage them. To replace, ensure that the lip is facing the oven opening. Fit the top and bottom seals first, then the side seals.

OVEN DOOR GLASS

Clean with conventional glass cleaners

COOK TOP ELEMENTS

Remove all spillovers with a damp cloth as soon as possible.

When cool, the element may be cleaned with a nylon scourer or a damp cloth and domestic cleaning powder. Do not scratch or scrape the surface. After cleaning, wipe surface with a clean damp cloth. Dry the element by switching it on for a short time and then wipe just a trace of cooking oil over the surface. (This is particularly important if the cooktop will not be used for a period of time).

Use clean dry saucepans, as water, salt, condensation and spillovers can cause hotplate corrosion. Specialised cleaners readily available for domestic cooktops are also recommended. With regular use they will build up a protective coating on the element surface and make future cleaning easier.

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4.2 ROUTINE PROCEDURES

	PROCEDURE	INTERVAL
DOOR SEALS	Check for deterioration.	12 months
DOOR PIVOT BUSHES	Check for wear.	12 months
DOOR CATCH	Ensure that catch is adjusted such that the door closes properly.	12 months
ELEMENTS	Check that element resistances are correct to their rating (refer 6.3.11)	12 months

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5. TROUBLE SHOOTING

⚠ **WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

5.1 OVEN

FAULT	POSSIBLE CAUSE	REMEDY
THE OVEN DOES NOT OPERATE / START	The mains isolating switch on the wall, circuit breaker or fuses are "off" at the power board.	Turn on.
	The power switch on the oven is off.	Depress switch. Switch will illuminate.
	Incorrect electrical supply. **(Refer fault diagnosis 6.1.1)**	Ensure electrical supply correct.
	Power switch on unit faulty. **(Refer fault diagnosis 6.1.1)**	Replace. **(Refer service section 6.3.4)**
FAN DOESN'T OPERATE	Door not closed. *(Fan only operates with door closed).*	Close door.
	Door microswitch out of adjustment. **(Refer fault diagnosis 6.1.2)**	Adjust. **(Refer service section 6.4.2)**
	Door microswitch faulty **(Refer fault diagnosis 6.1.2)**	Replace. **(Refer service section 6.3.2)**
	Fan motor faulty. **(Refer fault diagnosis 6.1.2)**	Replace. **(Refer service section 6.3.15)**
	Wiring.	Check for any loose wiring.
OVEN LIGHT NOT ILLUMINATING - DOOR OPEN	Blown bulb.	Replace. **(Refer service section 6.3.1)**
	No power to light. **(Refer fault diagnosis 6.1.3)**	
OVEN LIGHT NOT ILLUMINATING - DOOR CLOSED	Blown bulb.	Replace. **(Refer service section 6.3.1)**
	Light switch faulty. **(Refer fault diagnosis 6.1.4)**	Replace. **(Refer service section 6.3.4)**
60 MINUTE TIMER WILL NOT TIME DOWN	Timer faulty.	Replace. **(Refer service section 6.3.7)**
60 MINUTE TIMER INACCURATE BELOW 20 MINUTES	Timer not set correctly.	For timer settings below 20 minutes, always rotate past 20 minutes, then back to desired time.

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FAULT	POSSIBLE CAUSE	REMEDY
60 MINUTE TIMER NO TIME UP BUZZER	Zero (time up) position not set correctly.	**(Refer service section 6.4.5)**
	Buzzer faulty. **(Refer fault diagnosis 6.1.5)**	Replace. **(Refer service section 6.3.6)**
60 MINUTE TIMER NO TIME UP INDICATOR	Timer not switching on buzzer. **(Refer fault diagnosis 6.1.5)**	Replace. **(Refer service section 6.3.7)**
	Indicator faulty. **(Refer fault diagnosis 6.1.6)**	Replace. **(Refer service section 6.3.3)**
NO HEAT	Power relay faulty (From S/N 232054 only). **(Refer fault diagnosis 6.1.7)**	Replace. **(Refer service section 6.3.5)**
	Hold relay/mini contactor faulty. **(Refer fault diagnosis 6.1.7)**	Replace. **(Refer service section 6.3.11)**
	Thermostat faulty **(Refer fault diagnosis 6.1.7)**	Replace. **(Refer service section 6.3.9)**
NO TEMPERATURE CONTROL	Thermostat faulty **(Refer fault diagnosis 6.1.8)**	Replace. **(Refer service section 6.3.9)**
SLOW RECOVERY	Oven in 'Roast 'n Hold' mode.	Switch off 'Roast 'n Hold'.
	Overloading of oven.	Reduce oven loading.
	Electrical supply incorrect.	Check supply voltage is as per rating plate voltage.
	Fan not working.	Check fan operation.
	Thermostat calibration. **(Refer fault diagnosis 6.1.9)**	Correct calibration. **(Refer service section 6.4.1)**
	Element(s) not working.	Correct element fault. **(Refer Fault: Top element, Fault: Bottom element)**
BOTTOM ELEMENT NOT WORKING	Element faulty (blown). **(Refer fault diagnosis 6.1.10)**	Replace. **(Refer service section 6.3.13)**
TOP ELEMENT NOT WORKING (IN BAKE MODE—NOT GRILL / BROIL MODE)	Element faulty / blown. **(Refer fault diagnosis 6.1.11)**	Replace. **(Refer service section 6.3.13)**
NO THERMOSTAT HEATING INDICATOR	Indicator faulty. **(Refer fault diagnosis 6.1.12)**	Replace. **(Refer service section 6.3.3)**
GRILL NOT WORKING	Element faulty / blown. **(Refer fault diagnosis 6.1.13)**	Replace. **(Refer service section 6.3.13)**
GRILL INDICATOR LIGHT NOT WORKING	Indicator faulty. **(Refer fault diagnosis 6.1.14)**	Replace. **(Refer service section 6.3.3)**

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FAULT	POSSIBLE CAUSE	REMEDY
ROAST TIMER (180 MINUTE) WILL NOT TIME DOWN	Roast 'n' Hold switch not depressed.	Depress switch. Switch will illuminate.
	No power to timer / timer faulty. **(Refer fault diagnosis 6.1.15)**	Correct electrical fault / replace timer. **(Refer service section 6.3.8)**
	'Roast 'n Hold' switch faulty. **(Refer fault diagnosis 6.1.15)**	Replace. **(Refer service section 6.3.4)**
NO HOLD INDICATOR	Faulty indicator. **(Refer fault diagnosis 6.1.16)**	Replace. **(Refer service section 6.3.3)**
	Faulty timer. **(Refer fault diagnosis 6.1.16)**	Replace. **(Refer service section 6.3.8)**
HOLDING TEMPERATURE INCORRECT	Hold thermostat set temperature incorrect.	Adjust to correct temperature. **(Refer service section 6.4.4)**
	Hold thermostat faulty. **(Refer fault diagnosis 6.1.17)**	Replace. **(Refer service section 6.3.10)**
DOOR DOES NOT CLOSE	Tray in way of door.	Correctly position tray in rack.
	Door seal obstruction.	Correctly install door seal. **(Refer service section 6.3.19)**
	Door handle installed incorrectly.	Fit correctly. **(Refer installation section)**
	Door ball catch setting incorrect.	Adjust. **(Refer service section 6.4.3)**
	Door pivot bushes / pins worn.	Replace. **(Refer service section 6.3.20)**
DOOR SEAL LEAKS	Door seal damaged.	Replace. **(Refer service section 6.3.19)**
	Door seal incorrectly fitted.	Correctly install door seal. **(Refer service section 6.3.19)**
	Door ball catch setting incorrect.	Adjust. **(Refer service section 6.4.3)**
	Door pivot bushes / pins worn.	Replace. **(Refer service section 6.3.20)**

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5.2 HOB

FAULT	POSSIBLE CAUSE	REMEDY
THE HOB DOES NOT OPERATE / START	The mains isolating switch on the wall, circuit breaker or fuses are “off” at the power board. The fuses at the rear of the hob have blown. Incorrect electrical supply.	Turn on. Replace fuse link. **(Refer service section 6.3.21)** Check electrical fault. Ensure electrical supply correct.
REAR ELEMENTS DO NOT WORK FRONT ELEMENTS DO NOT WORK	One fuse at rear of hob has blown. One fuse at rear of hob has blown.	Check electrical fault. Replace fuse link. **(Refer service section 6.3.21)** Check electrical fault. Replace fuse link. **(Refer service section 6.3.21)**
ONE ONLY ELEMENT DOES NOT WORK	Energy regulator faulty. **(Refer fault diagnosis 6.1.19)** Element failed. **(Refer fault diagnosis 6.1.18)**	Replace energy regulator. **(Refer service section 6.3.23)** Replace element. **(Refer service section 6.3.22)**
NO INDICATOR LIGHT	Faulty indicator. Energy regulator faulty. **(Refer fault diagnosis 6.1.19)**	Replace. **(Refer service section 6.3.24)** Replace. **(Refer service section 6.3.23)**
NO HEAT CONTROL	Energy regulator faulty. **(Refer fault diagnosis 6.1.19)**	Replace. **(Refer service section)**
SLOW HEATING ON ELEMENT	Cooking pot / pan uneven base. **(Refer operation 3.2)** Energy regulator faulty. **(Refer fault diagnosis 6.1.19)** One element heating coil faulty. **(Refer fault diagnosis 6.1.18)** Element temperature limiter activated. **(Refer fault diagnosis 6.1.19)**	Use suitable pot / pan. Replace. **(Refer service section 6.3.23)** Replace element. **(Refer service section 6.3.22)** Use suitable pots. Replace element if faulty. **(Refer service section 6.3.22)**

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6. SERVICE PROCEDURES

⚠ **WARNING: ENSURE POWER SUPPLY IS SWITCHED OFF BEFORE SERVICING.**

⚠ **WARNING: ALL INSTALLATION AND SERVICE REPAIR WORK MUST BE CARRIED OUT BY QUALIFIED PERSONS ONLY.**

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6.1 FAULT DIAGNOSIS

6.1.1 OVEN DOES NOT OPERATE / START

Incorrect electrical supply

Check that the voltage across phase and neutral (L1 and L2) terminals of terminal block is the voltage as stated on the unit's electrical rating plate.

If incorrect, check electrical connection of supply wiring and / or check electrical supply.

Power switch faulty

Check if power switch latches. If the switch does not latch, then switch is faulty—replace.

With switch latched, check voltage across terminal one to terminal three or four. If there is no voltage, check for fault in wiring.

Check voltage across terminal two to terminal three or four. If there is no voltage, then switch is faulty—replace.

NOTE: When power switch is latched, it should illuminate if operating correctly.

6.1.2 FAN DOESN'T OPERATE

Microswitch out of adjustment

Open oven door and manually depress door microswitch actuator at top right of oven. If this activates the fan, then the microswitch actuator arm at rear of oven requires adjustment.

Microswitch faulty

Check voltage across microswitch terminals to neutral.

With the door closed there should be power to the com terminal and the n.o. terminal.

With the door open there should be power to the com terminal and the n.c. terminal.

If not, microswitch is faulty—replace.

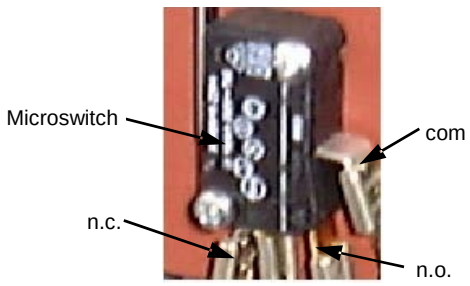

Figure 6.1.1

Fan motor faulty

Check the supply voltage across motor terminals. If there is no voltage then check the electrical connections of supply wiring.

If voltage is correct then check the oven fan for free rotation. Remove any obstruction.

If fan is free to spin and the voltage supply is correct, then the motor is faulty—replace.

6.1.3 OVEN LIGHT NOT ILLUMINATING—DOOR OPEN

No power to light

Check the supply voltage across lamp housing terminals at rear of oven. If the voltage is correct, replace the bulb (if faulty). If the bulb is OK, check lamp housing. Replace if faulty.

If there is no voltage, open oven door and manually depress door microswitch actuator at top right of oven. If this activates the fan, then the microswitch actuator arm at rear of oven requires adjustment.

Check voltage across micro-switch terminals to neutral.

With the door closed there should be power to the com terminal and the n.o. terminal.

With the door open there should be power to the com terminal and the n.c. terminal.

If not, microswitch is faulty—replace.

6.1.4 OVEN LIGHT NOT ILLUMINATING—DOOR CLOSED

Light switch faulty

Check voltage to the bottom terminal of the switch. If there is no voltage, then check wiring.

With switch depressed, check voltage at top terminal. If there is no voltage, then replace the switch.

If voltage is correct, then check wiring to light.

NOTE: Alternately, perform a continuity test across the terminals with the light switch depressed.

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6.1.5 60 MINUTE TIMER NO TIME UP BUZZER

Buzzer faulty

With timer in 'zero' position, check the buzzer at top of control panel (inside) for voltage across terminals. If voltage is correct then buzzer is faulty—replace.

If there is no voltage, then check wiring.

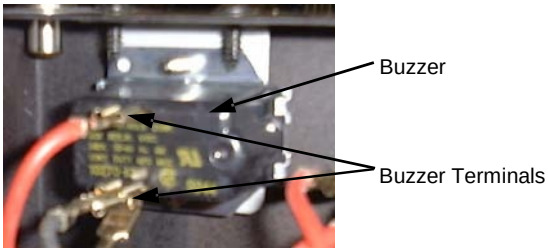

Figure 6.1.2

Timer not switching on buzzer

With timer in zero position, check voltage to top connection (terminal 1) and bottom connection (terminal 2) of timer. If there is no voltage at terminal 1 then check wiring.

If no voltage at terminal 2 then timer is faulty—replace.

NOTE: Timer will continue to run for approximately three minutes below zero. Buzzer and time up indicator will continue until the timer manually switched off (to vertical position).

6.1.6 60 MINUTE TIMER NO TIME UP INDICATOR

Indicator faulty

With the timer in the zero position, check for voltage across the indicator light. If correct, then the indicator light is faulty—replace.

If there is no voltage then check wiring.

6.1.9 NO HEAT

Power relay faulty - From S/N 232054

Check voltage to terminal 7 on power relay (on rear panel of oven). If there is no voltage then check wiring to the relay.

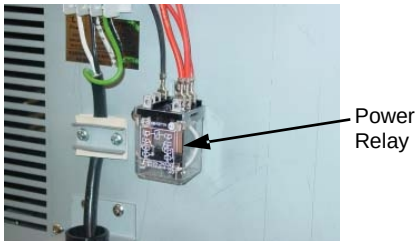

Figure 6.1.3

Ensure that the power switch on the unit is turned on, and check for voltage at terminal 4 of the power relay. If there is no voltage at 4 then check that the relay is energised (i.e. voltage between terminals A and B. If not then check wiring. If there is voltage and there is no power at terminal 4 then the relay is faulty - replace.

If there is voltage at terminal 4 then check the hold relay and the thermostat (refer below).

Hold relay faulty - From S/N 232054

Check voltage to terminal 1 on oven thermostat. If there is no voltage then check voltage at terminals 1 and 7 on hold relay (inside control panel). If there is no voltage to terminal 7 then check wiring. If there is no voltage at terminal 1 then check that the relay is not energised (i.e. there should be no power between terminals A and B on the relay). If the relay is not energised, and there is no voltage at terminal 1 then the relay is faulty - replace.

NOTE: The relay should only be energised when the 'Roast 'n Hold' switch is depressed.

If there is voltage at terminal 1 then check all wiring to the thermostat.

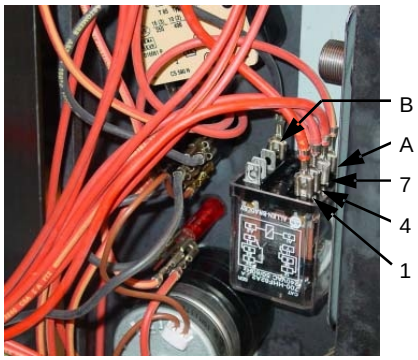

Figure 6.1.4

Hold mini-contactor faulty - to S/N 232053

Check voltage to terminal 1 on oven thermostat. If there is no voltage then check voltage through terminal 21 and 22 on mini contactor (inside control panel). If there is no voltage to terminal 21 then check wiring. If there is no voltage to terminal 22 then check that the contact indicator on centre of the contactor is in '0' position. If indicator is in '0' position and there is no voltage to 21 then replace contactor.

If indicator is in the '1' position then check the voltage across contactor coil terminals A1 and A2.

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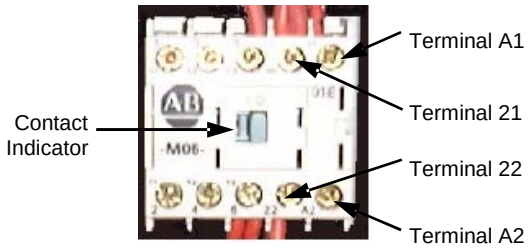

Figure 6.1.5

NOTE: There should be no voltage across these terminals when 'Roast 'n Hold' is not selected.

If the indicator is in position '1' with no voltage across A1 and A2 then the contactor is faulty—replace.

Thermostat faulty

Set thermostat to 200°C or 400°F. Check the voltage out of terminal 2 on the thermostat. If there is no voltage then the thermostat is faulty—replace.

If the voltage is correct and the heating light is on then check all wiring to elements.

6.1.8 NO TEMPERATURE CONTROL

Thermostat faulty

With thermostat in off (vertical) position, the heating indicator should be off. If not then the thermostat is faulty—replace.

Check that the thermostat phial is in correct location and check for broken capillary tube—replace if damaged.

Place an accurate digital thermometer probe in centre of oven. Set thermostat to 180°C or 355°F. Close the oven door and allow oven thermostat to regain temperature. If the temperature overshoots by 50°C and continues, switch off and replace.

6.1.9 SLOW RECOVERY

Thermostat out of calibration

Place an accurate digital thermometer probe in centre of oven. Set thermostat to 180°C or 355°F. Close the oven door and allow oven thermostat to cycle on and off twice. Record oven centre temperature for the next thermostat on and off cycle. The thermostat should cycle on and off between 165°C and 195°C or 330°F and 385°F when set to the above temperature. If oven temperature is outside these ranges, then the thermostat requires recalibration.

NOTE: Thermostat cycling span should be ±15°C or 27°F

6.1.10 BOTTOM ELEMENT NOT WORKING

Element faulty (blown)

With the thermostat on and heating check voltage across bottom element terminals at rear of oven. If the voltage is correct then check the current draw of element. If there is no current draw then element is faulty—replace.

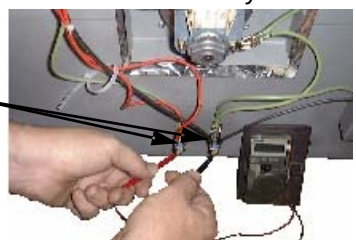

Figure 6.1.6

If there is no voltage then check voltage is being supplied to bottom element from terminal 6 on switch block mounted to the front of the thermostat (fig 6.4.1). If no voltage at 6 then check for voltage at terminal P6. If power to P6 (and none to 6), then the thermostat is faulty—replace.

NOTE: Correct bottom element current draw:

220—240V: 8.7A ± 5%

6.1.11 TOP ELEMENT NOT WORKING (IN BAKE MODE—NOT GRILL / BROIL)

Element faulty / blown

NOTE: In bake mode (50—270°C or 100—550°F) the outer coil only of the top element assembly operates. The inner coil works only when in grill or broil mode.

With thermostat on and heating check voltage across top element terminals at rear of oven. If voltage is correct then check current draw of the element. If there is no current draw then the element is faulty—replace.

If there is no voltage check voltage is being supplied to the top element from terminal 2 on switch block mounted to front of thermostat.

If voltage is correct then check wiring.

NOTE: Top outer element current draw:

220—240V: 3.5A ± 5%

6.1.12 NO THERMOSTAT HEATING INDICATOR

Indicator faulty

Check the voltage across the indicator terminals. If the voltage is correct then the indicator is faulty—replace.

If there is no voltage then check wiring.

6.1.13 GRILL NOT WORKING

Element faulty / blown

With thermostat in grill or broil position (fully clockwise), check that the grill indicator on the control panel indicates. If not, then check the voltage at terminal P5 on the thermostat switch (fig 6.4.1). If there is no voltage check that the switch has power on terminal 5. If there is power at terminal 5, but not at P5 when thermostat is in grill position, then the switch is faulty—replace thermostat assembly.

If grill indicator is illuminated, but the top inner grill element is not functioning, check the voltage at the top inner element coils at rear of oven. If the voltage is correct then check current draw of element. If there is no current draw then element is faulty—replace.

NOTE: Top inner element current draw:

220—240 V: 7.8A ± 5%

6.1.14 GRILL INDICATOR NOT WORKING

Indicator faulty

Check the voltage across the indicator terminals. If the voltage is correct then indicator is faulty—replace.

If there is no voltage then check wiring.

6.1.15 ROAST TIMER (180 MINUTE) WILL NOT TIME DOWN

No power to timer

Check the voltage at terminal 5 on underside of the 180 minute timer.

Check that one lead of timer motor is connected to terminal 5 of timer and the other lead is connected to neutral of 'Roast 'n Hold' switch.

If voltage at terminal 5 is correct and wiring is correct then the timer motor is faulty—replace timer.

If there is no power at terminal 5 check for power supply at terminal 4 of timer. If there is voltage at terminal 4 and not at terminal 6 with timer set, then timer switch is faulty—replace timer.

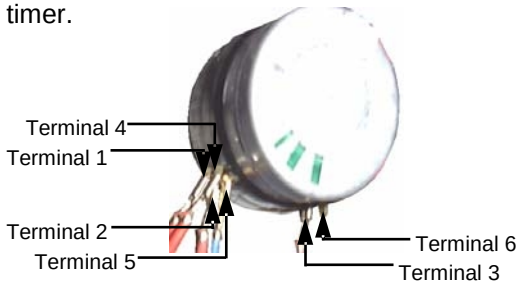

Figure 6.1.7

From Serial Number 232054:

If no voltage at terminal 4, check the relay behind the control panel is energised (i.e. voltage across terminals A and B). If there is no voltage then check wiring from the hold switch. If there is voltage then check that there is voltage at terminal 4 and terminal 7 of the hold relay. If there is voltage at 7, but none at 4 (and the relay is energised) then relay is faulty - replace. If no voltage at 7 then check wiring.

To Serial Number 232053:

If no voltage at terminal 4, then check mini contactor behind control panel is latched to the '1' position. If contactor is in '1' position then check wiring.

If contactor is in '0' position when 'Roast 'n Hold' switch illuminated then check the voltage across terminals A1 and A2 of mini contactor (fig 6.1.3). If the voltage is correct but the contactor in the off ('0') position then the contactor is faulty—replace.

If there is no voltage across A1 and A2 then check wiring.

'Roast 'n Hold' switch faulty

Check if the switch latches. If the switch does not latch then the switch is faulty—replace.

With the switch latched, check voltage across terminal 1 to terminal 3 or 4. If there is no voltage then check for fault in wiring.

Check voltage across terminal 2 to terminal 3 or 4. If there is no voltage then switch is faulty—replace.

NOTE: When the switch is latched, it should illuminate if operating correctly.

6.1.16 NO HOLD INDICATOR

Indicator faulty

Check the voltage across the indicator terminals. If the voltage is correct then the indicator is faulty—replace.

If there is no voltage then check wiring.

Timer faulty

Check the voltage at terminal 3 of timer, with timer in hold position. If the voltage is correct then check wiring.

If there is no voltage then check voltage at terminal 1 of timer. If there is voltage at 1, but no voltage at terminal 3 with timer in hold position, then timer switch is faulty—replace.

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6.1.17 HOLDING TEMPERATURE INCORRECT

Hold thermostat faulty

With the power switch on and illuminated, 'Roast 'n Hold' switch on and illuminated, and the roast (180 minute) timer set to hold, check that the hold indicator is illuminated.

With a cold oven (ie room temperature) check that the top outer and bottom oven elements only are heating. Test the voltage across the bottom element and top element terminals at the rear of oven. If the voltage is correct then refer Fault: Bottom element not working (trouble shooting section).

NOTE: If the main thermostat is set to off (vertical) position and 'Roast 'n Hold' mode is selected, then only the bottom element will heat.

If there is no voltage at the element terminals, check the voltage at terminal 2 (top) of the hold thermostat at bottom rear of control panel (fig 6.3.12). If there is no voltage then check wiring.

If the voltage is correct, and the thermostat is adjusted above oven temperature, then check for output voltage at terminal 1 (bottom). If there is no voltage and the thermostat will not switch on then the thermostat is faulty—replace.

If the voltage is correct but the bottom element is not working then check wiring.

6.1.18 HOB ELEMENT DOES NOT WORK

Element faulty

Remove red wire from terminal 4, black wire from terminal 1 and remove two terminal links. Check element coil resistances are correct.

	Terminals 1—4	Terminals 2—4	Terminals 2—3
1500 W	68 ohms	200 ohms	100 ohms
2000 W	61 ohms	169 ohms	61 ohms

An open circuit indicates faulty element coil—replace element.

If above readings are correct check insulation resistance of each element coil by checking each element terminal to earth / ground or conduct megger or dielectric withstand test on element. A short to earth / ground indicates faulty element—replace.

If element passes above tests then check wiring.

6.1.19 HOB HEAT NOT CONTROLLED CORRECTLY

Energy regulator faulty

Ensure that the energy regulator fitted is correct type: NZC Model TC108 15A 240V ac.

Check voltage to terminal 5. If no voltage check wiring.

Check for continuity from terminals N to neutral on supply terminal block. If no neutral supply, check wiring.

With switch in 'off' position there should be no voltage at terminal 2 (open circuit between terminal 5 and terminal 2). With control set to a LO to HI heat setting terminal 2 should be switched on. If not energy regulator is faulty—replace.

With switch in 'off' position there should be no voltage at terminal 3 (open circuit between terminal 5 and terminal 3). With control set to a LO to HI heat setting terminal 3 should be switched on. If not energy regulator is faulty—replace.

Above checks can be made with or without electrical supply switched on, however with electrical supply on, the terminal 3 element supply will cycle on / off at different time ranges dependent on control setting.

To check for correct energy regulator on / off cycling, electrical supply needs to be on.

With control set to full on (HI) position, terminal 3 (power to element) should be on continuously. With control set to position 5 terminal 3 (power to element) should cycle on for approximately eight seconds and off for approximately 12 seconds.

Lower settings will give longer off times and shorter on times, whilst higher settings will give shorter off times and longer on times.

Element temperature limiter tripped

Each of the hot plate elements has an inbuilt non-serviceable temperature limiter.

If the element is set to a high heat setting with no cooking pan on the element, or if the element has an unsuitable pan (refer operating instructions) that does not allow the element to dissipate it's heat, the inbuilt temperature limiter will turn off one of the heating coils in the element to prevent the element from overheating.

6.2 ACCESS

6.2.1 CONTROL PANEL

1) Open the oven door. Remove the micro-switch button by pulling straight off.
2) Undo the two screws now visible.

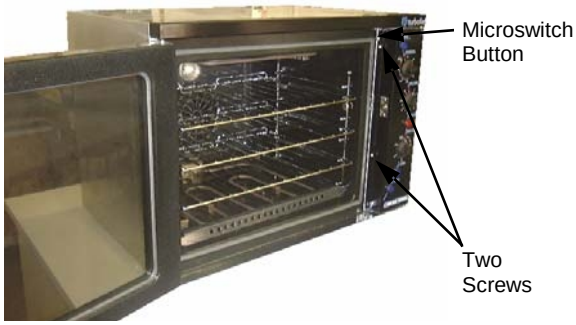

Figure 6.2.1

3) Panel is now free to hinge along right hand side. When closing the panel ensure wires and capillary tube are clear of metal or other terminals.

Figure 6.2.2

6.2.2 SERVICE (REAR) PANEL

1) Undo the four screws holding the panel.

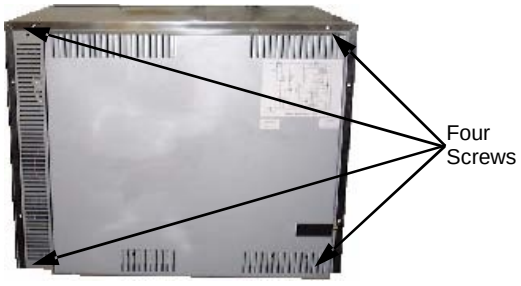

Figure 6.2.3

2) Remove panel.

6.2.3 BAFFLE

1) Remove trays, racks, element cover and left hand side rack.
2) Undo lamp cover.

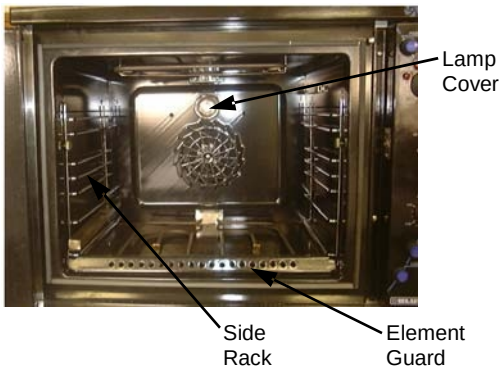

Figure 6.2.4

3) Remove baffle.

6.2.4 CONTROL PANEL—REAR

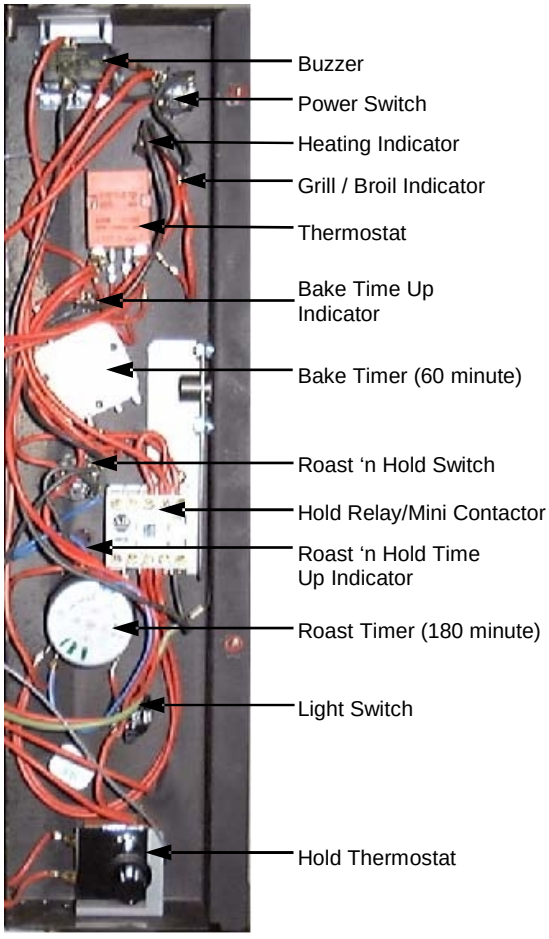

Figure 6.2.5

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6.2.5 HOB (COOK TOP)

1) Remove the nine screws securing the hob back panel to the unit.

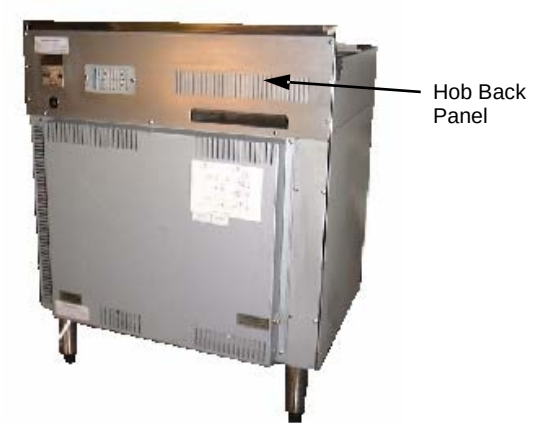

Figure 6.2.6

2) Remove both fuses.

3) Remove the two screws securing the retaining clamp to the centre rear of the hob.

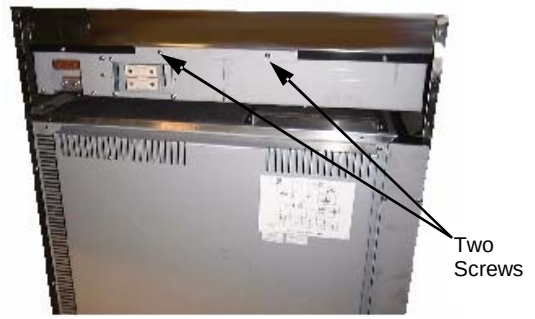

Figure 6.2.7

4) Lift out hob for servicing.

6.2.6 HOB BASE PANEL

1) Remove hob (refer 6.2.5).

2) Turn the hob over and remove eight screws securing the base panel to the hob.

Figure 6.2.8

6.3 REPLACEMENT

6.3.1 LIGHT BULB / GLASS

1) Unscrew lamp cover.

Figure 6.3.1

2) Unscrew bulb out of fitting.

3) Screw in replacement bulb.

4) Ensure seal fitted. Screw lamp cover into holder with baffle fitted (do not over tighten).

6.3.2 DOOR MICROSWITCH

1) Remove service panel (refer 6.2.2).

2) Remove two screws holding microswitch to bracket.

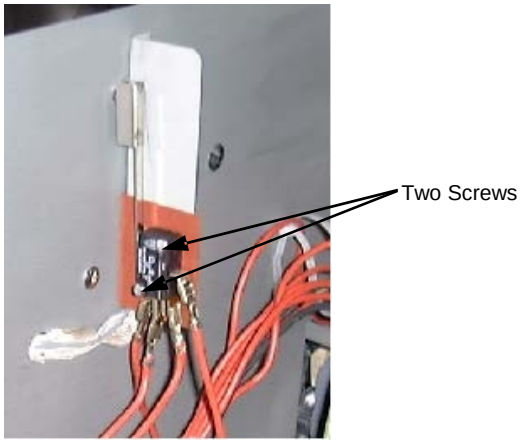

Figure 6.3.2

3) Transfer wires to new micro-switch and re-assemble.

4) Adjust microswitch (refer 6.4.2).

6.3.3 INDICATOR NEON LIGHT

1) With control panel open (refer 6.2.1) remove the wires from the back of the neon.

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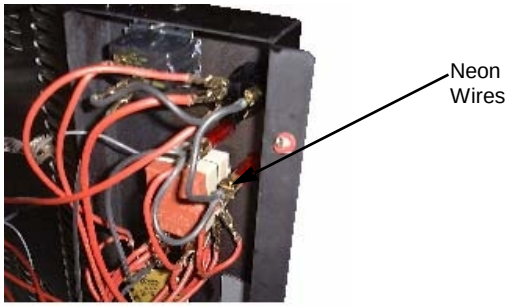

Figure 6.3.3

2) From back push neon through front of panel rotating clockwise.

3) Push new neon in from front of panel, and reconnect wires.

6.3.4 POWER / ROAST / LIGHTS SWITCHES

1) With control panel open (refer 6.2.1) remove the wires from the back of the switch, noting their positions.

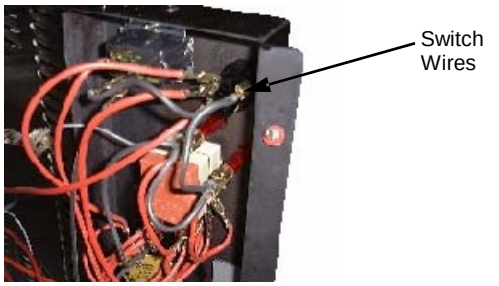

Figure 6.3.4

2) From back push switch through front of panel.

3) Push new switch in from front of panel, and reconnect wires.

6.3.5 POWER RELAY (FROM S/N 232054)

1) Remove service panel (refer 6.2.2).

2) Remove the two screws securing the relay to the rear panel.

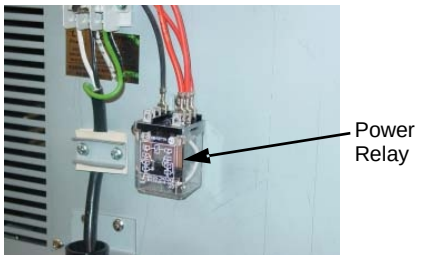

Figure 6.3.5

3) Transfer the wires to the new relay.

4) Secure the relay to the rear panel with two screws and replace the service panel.

6.3.6 BUZZER

1) Remove control panel (refer 6.2.1).

2) Remove two screws holding buzzer bracket to panel.

Figure 6.3.6

3) Withdraw and remove two screws holding buzzer to bracket.

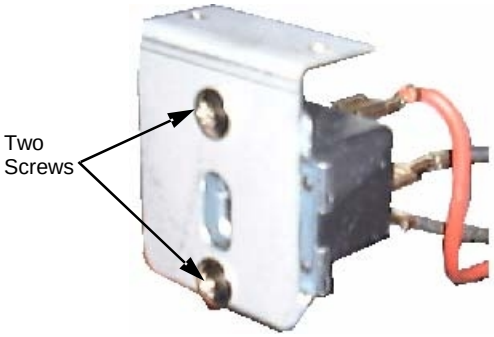

Figure 6.3.7

4) Transfer wires to new buzzer.

5) Reassemble in reverse order.

6.3.7 BAKE TIMER

1) Remove bake timer knob by pulling it firmly away from control panel.

2) Open control panel (refer 6.2.1) and undo two screws securing timer.

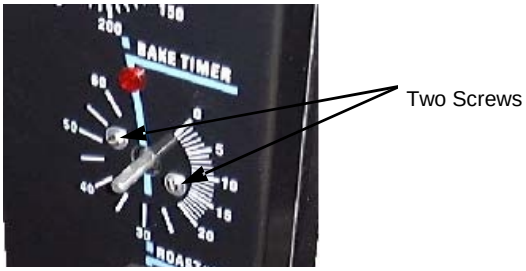

Figure 6.3.8

3) Transfer wires to new timer.

4) Withdraw old timer and insert new timer, securing with screws.

5) Replace knob.

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6.3.8 ROAST TIMER

1) Remove roast timer knob by pulling it firmly away from control panel.
2) Open control panel (refer 6.2.1) and undo two screws securing timer.

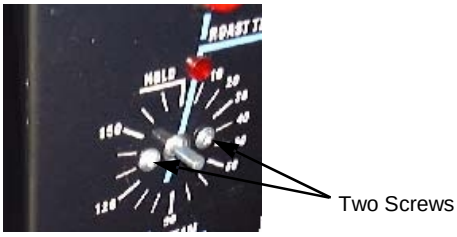

Figure 6.3.9

3) Transfer wires to new timer.
4) Withdraw old timer and insert new timer, securing with screws.
5) Replace knob.

6.3.9 THERMOSTAT

1) Pull knob off front of thermostat
2) Open control panel (refer 6.2.1) and undo two screws securing thermostat.

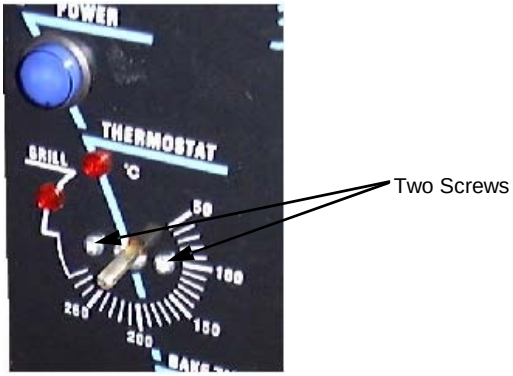

Figure 6.3.10

3) Transfer wires to new thermostat.
4) Remove service panel (refer 6.2.2) and from inside of oven loosen two screws holding thermostat phial bracket.

Figure 6.3.11

5) Withdraw old thermostat phial through rear of oven.
6) Remove fibreglass sleeve from old thermostat and fit it to replacement thermostat.

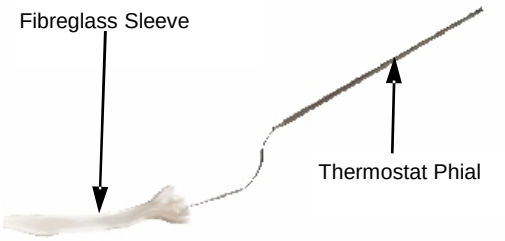

Figure 6.3.12

7) Insert new thermostat.
8) Re-assemble in reverse order.

6.3.10 HOLD THERMOSTAT

1) Open control panel (refer 6.2.1) and undo two screws securing hold thermostat bracket.

Figure 6.3.13

2) Transfer wires to new thermostat.
3) Remove service panel (refer 6.2.2) and from inside of oven loosen the thermostat phial bracket.

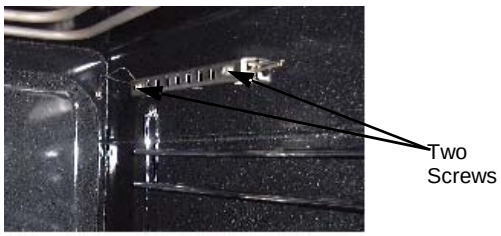

Figure 6.3.14

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4) Withdraw old thermostat phial through rear of oven.

5) Insert new thermostat.

6) Re-assemble in reverse order.

6.3.11 HOLD RELAY (FROM S/N 232054)

1) Open control panel (refer 6.2.1) and transfer wires from old hold relay to new relay.
2) Remove two screws securing the old hold relay to control panel.

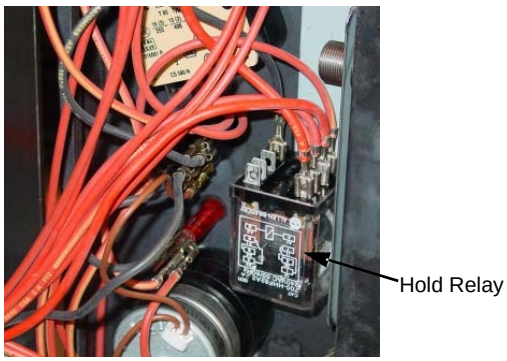

Figure 6.3.15

3) Secure new hold relay to the control panel using two screws.

6.3.12 MINI-CONTACTOR (TO S/N 232053)

1) Open control panel (refer 6.2.1) and transfer wires from old mini-contactor to new contactor.
2) Remove two screws securing old mini-contactor to control panel.

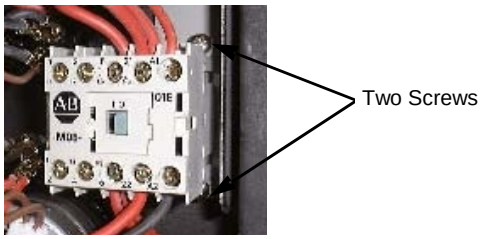

Figure 6.3.16

3) Secure new mini-contactor to control panel using two screws.

6.3.13 ELEMENTS

1) With service panel and baffle removed (refer 6.2.2 and 6.2.3) remove the wires from the element(s).

2) Unscrew the element from inside the oven.

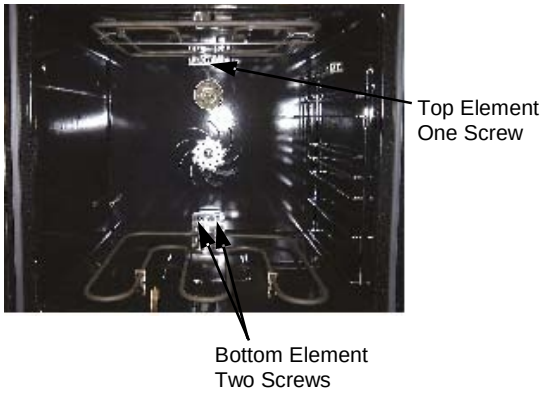

Figure 6.3.17

3) Pull element carefully to remove.

4) Replace and re-assemble in reverse order.

Element Ratings ±5%

220—240V	Top Inner Element	29.5 ohms
	Top Outer Element	66.5 ohms
	Bottom Element	27.3 ohms

6.3.14 FAN

1) With service panel and baffle removed (refer 6.2.2 and 6.2.3) undo the centre nut.

NOTE: LH thread - Turn clockwise to loosen.

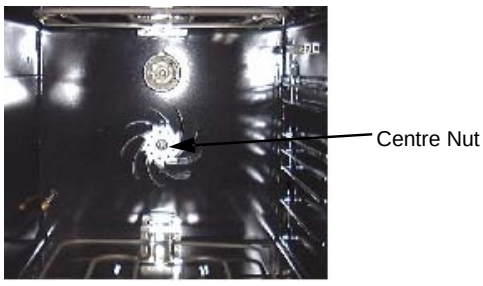

Figure 6.3.18

2) Replace and re-assemble in reverse order.

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6.3.15 MOTOR

1) Remove fan (refer 6.3.15) and then remove the wires that go to the motor.

2) Undo the four screws holding the motor bracket in place (from the outside) and remove motor assembly.

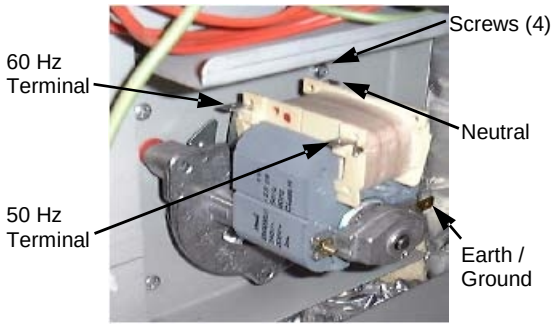

Figure 6.3.19

3) Remove three screws holding motor to bracket and remove motor.

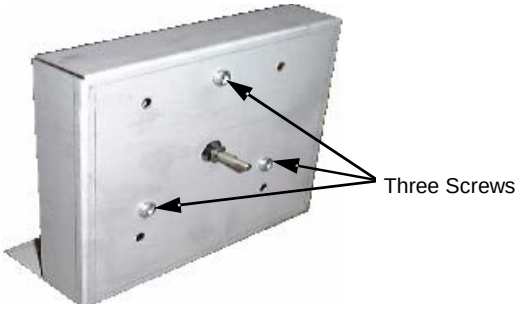

Figure 6.3.20

4) Replace and re-assemble in reverse order.

5) Ensure wire connections are correct to the voltage supply—60 Hz / 50 Hz (fig 6.3.23)

6.3.16 OUTER GLASS

1) Open door

2) Undo two screws securing Turbofan cover plate to oven, and remove cover plate.

Figure 6.3.21

3) Remove LH screw whilst supporting the door. Lift bracket and remove door from oven.

Figure 6.3.22

4) Remove screws securing door handle.

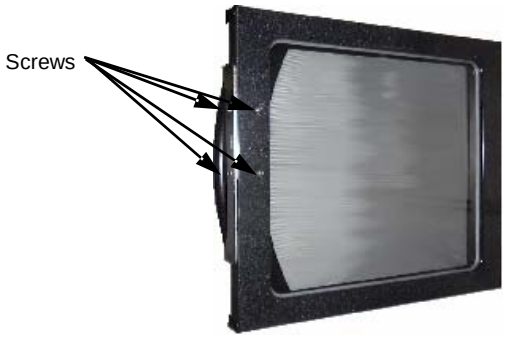

Figure 6.3.23

5) Remove two screws in top trim and two screws in bottom trim of door, and remove trim panels.

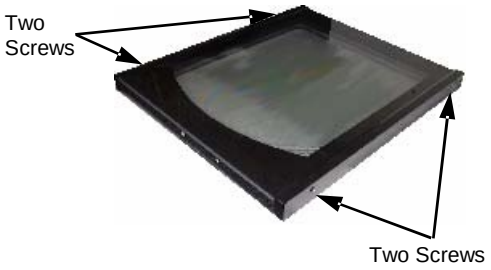

Figure 6.3.24

6) Lift outer glass away from door.

7) To replace, ensure that the two silicone rubber seals are in place on the left hand and right hand side of the door frame. Clean the inside of the glass and refit it, ensuring that the silicone rubber seals cover the outer edges of the glass. Refit the bottom trim.

6.3.17 INNER GLASS

1) Remove the outer glass as above. Uncrimp the retaining lugs of the window spacer and remove the spacer and glass.

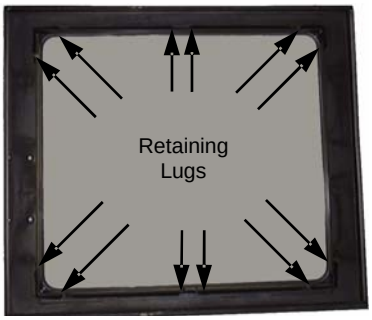

Figure 6.3.25

2) To replace, ensure the silicone rubber seal has not been displaced. Clean the glass and refit it. Place the window spacer in position and crimp the retaining lugs over to hold the glass in place. Refit outer glass as above.

6.3.18 INNER GLASS SEAL

1) Remove the door inner glass (refer 6.3.18).

2) The inner glass seal can now be removed and replaced.

NOTE: When fitting new seal, ensure join is at top of door.

6.3.19 DOOR SEALS

1) Open oven door.

2) To remove, hold at their centre point and pull forward until they unclip

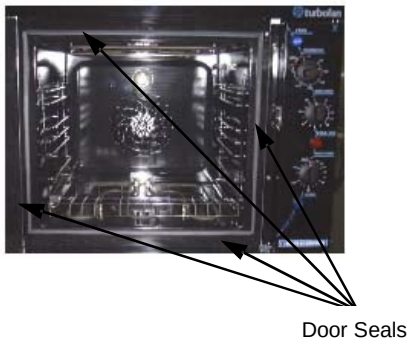

Figure 6.3.26

3) Refit new seals.

NOTE: Fit top and bottom seals first, with open side of seal facing downwards. Fit side seals with open side facing outwards.

6.3.20 DOOR PIVOT BUSHES

1) Remove door as per steps one to three of section 6.3.16.

2) Door bushes can now be removed and replaced.

3) Reinstall door by reversing steps one to three of section 6.3.16.

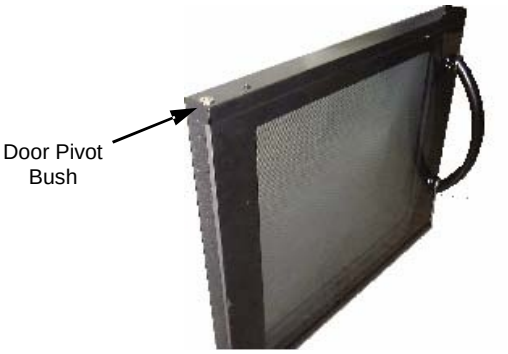

Figure 6.3.27

6.3.21 COOK TOP FUSES

⚠ **WARNING: DO NOT TOUCH THE FUSES UNLESS THE POWER SUPPLY IS SWITCHED OFF AT THE WALL.**

1) Remove two screws securing the fuse cover panel to the rear of the unit.

Figure 6.3.28

2) The fuses can now be removed and the fuse wire replaced as required.

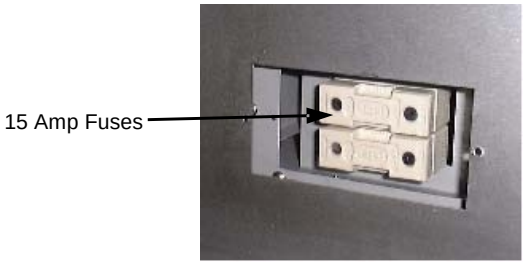

Figure 6.3.29

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6.3.22 HOB ELEMENTS

1) Remove hob (refer 6.2.5) and the hob base panel (refer 6.2.6).
2) Remove wires from element, noting their positions (refer electrical wiring diagram 8.2).
3) Unscrew centre nut and remove element clamp.

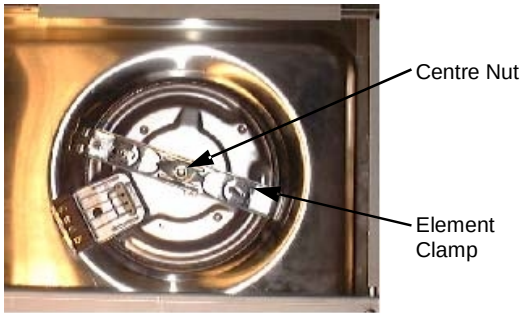

Figure 6.3.30

4) Element can now be removed through top of hob and replaced.

6.3.23 HOB ENERGY REGULATORS

1) Remove hob (refer 6.2.5) and hob base panel (6.2.6).
2) Remove knob from top of hob control panel by pulling firmly away from control panel.
3) Unscrew centre nut.

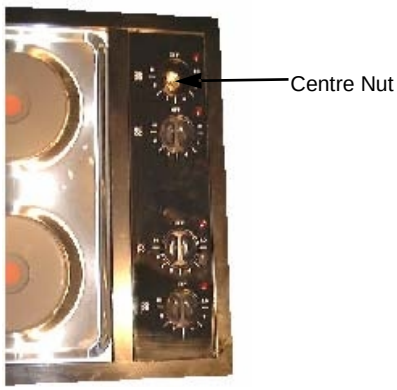

Figure 6.3.31

4) Turn the hob over and withdraw the energy regulator.
5) Transfer the wires to the new energy regulator (refer electrical wiring diagram 8.2).
5) Reassemble in reverse order.

6.3.24 HOB INDICATOR LIGHT

1) Remove hob (refer 6.2.5) and hob base panel (refer 6.2.6).
2) Remove wires from back of indicator.
3) From bottom, push indicator through top of hob control panel, rotating clockwise.
4) Push new indicator in from top of panel and reconnect wires.

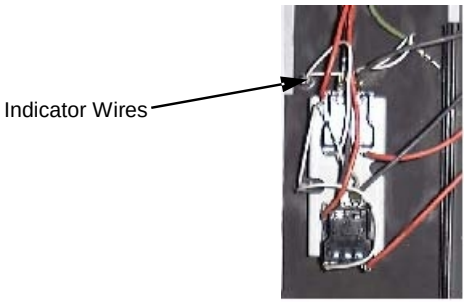

Figure 6.3.32

6.3.25 HOB CENTRE SECURING NUT

If the hob pressing is bowed excessively the centre securing nut may have come away.

To repair:

1) Remove hob (refer 6.2.5) and the hob base panel (refer 6.2.6).
2) Inspect stud and securing nut.

Figure 6.3.33

3) Repair as necessary.

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6.4 ADJUSTMENT / CALIBRATION

6.4.1 THERMOSTAT CALIBRATION

IMPORTANT: IF THE OVEN TEMPERATURE NEEDS TO BE INCREASED, ENSURE THAT THE THERMOSTAT IS IN THE 'OFF' POSITION BEFORE CARRYING OUT ADJUSTMENT. IF OVEN TEMPERATURE NEEDS TO BE DECREASED, ENSURE THERMOSTAT IS IN THE 'MAX' TEMPERATURE POSITION BEFORE CARRYING OUT ANY ADJUSTMENT.

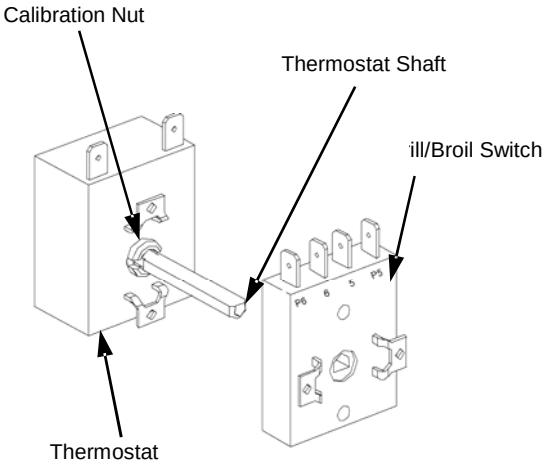

Figure 6.4.1

1) Turn off power.

2) Remove thermostat knob by pulling it firmly away from control panel.

3) Open control panel (refer 6.2.1). Remove two screws on control panel holding thermostat.

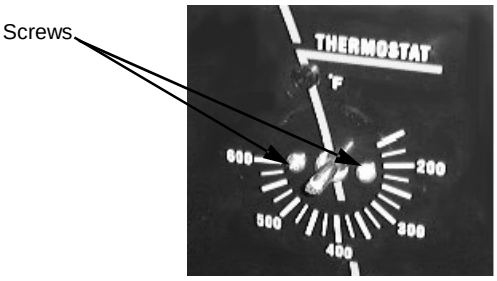

Figure 6.4.2

4) The thermostat can now be removed.

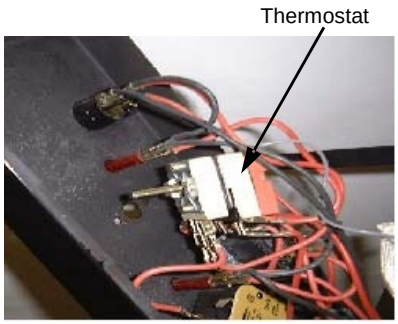

Figure 6.4.3

5) Carefully remove two screws holding grill/ broil switch to thermostat.

HINT: Tape grill/broil switch assembly together before removal to prevent it from springing apart.

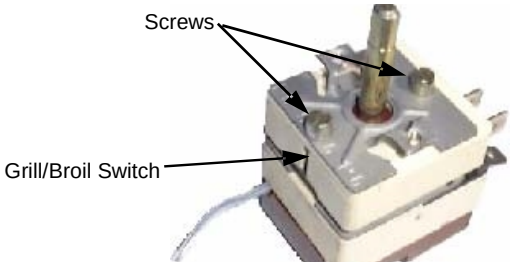

Figure 6.4.4

7) Adjust the calibration nut located at the base of the thermostat shaft.
To increase oven temperature, turn calibration nut anticlockwise.
To decrease oven temperature, turn calibration nut clockwise.
Adjustment of the calibration nut by 1° angular will alter oven temperature by approximately 2°C (3.6°F).

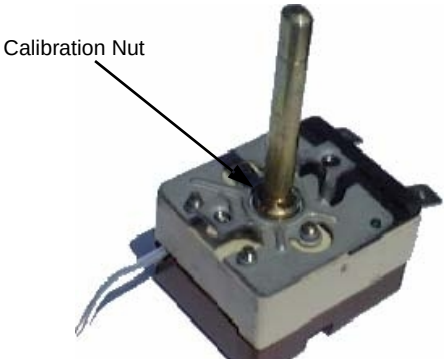

Figure 6.4.5

8) Reassemble grill/broil switch onto thermostat and fit assembly back onto control panel.

9) Turn on power and recheck oven thermostat calibration.

10) Repeat procedure if necessary.

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6.4.2 DOOR MICROSWITCH ADJUSTMENT

1) Open oven door.
2) Remove service panel (refer 6.2.2).
3) With fingers, bend actuator arm of microswitch so that switch operates when door is in closed position.

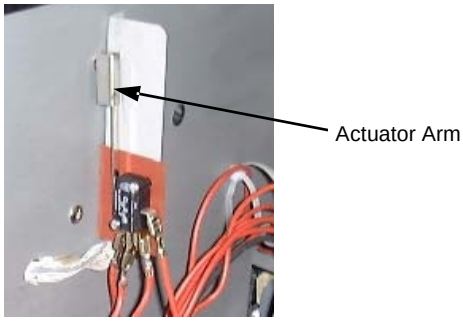

Figure 6.4.6

6.4.3 DOOR ALIGNMENT

1) Alignment of the door can be achieved by loosening the two hex head bolts securing the bottom plate to the oven body. The plate may now be moved sideways or in/ out to achieve correct door alignment. (Door should be parallel to bottom plate and touching oven seal evenly). When correct tighten bolts.

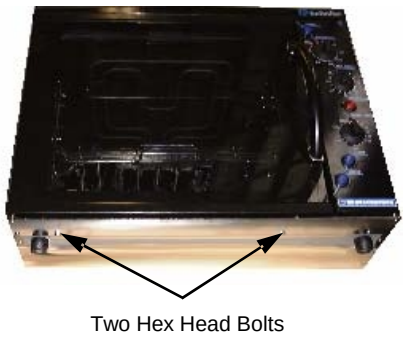

Figure 6.4.7

2) To adjust the door catch, loosen locknut and turn the slot (using the tool supplied with the unit); anticlockwise to increase roller height, clockwise to decrease roller height.

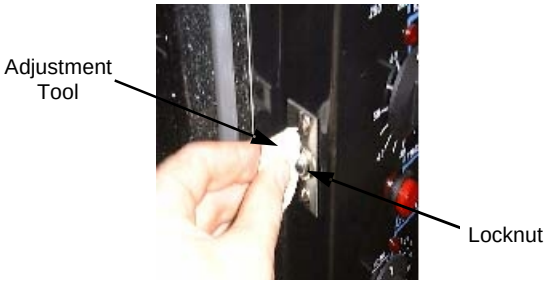

Figure 6.4.8

6.4.4 HOLD TEMPERATURE ADJUSTMENT

1) The hold temperature of the oven can be adjusted by turning the hold thermostat dial to the desired hold temperature. This dial is located inside the control panel.

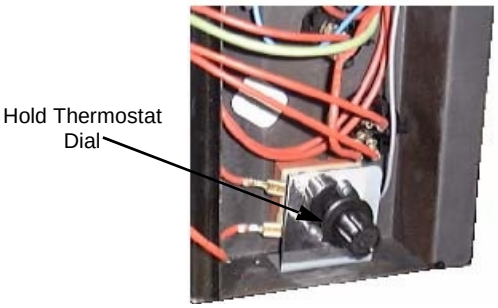

Figure 6.4.9

6.4.5 60 MINUTE TIMER ZERO POSITION ADJUSTMENT

1) Remove 60 minute timer knob by pulling it firmly away from control panel.
2) Open control panel (refer 6.2.1). Loosen two screws on control panel holding 60 minute timer.

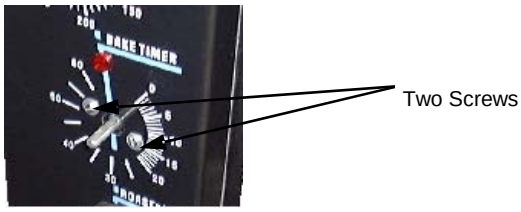

Figure 6.4.10

3) The timer can now be rotated as required to ensure that the buzzer sounds at the zero position.

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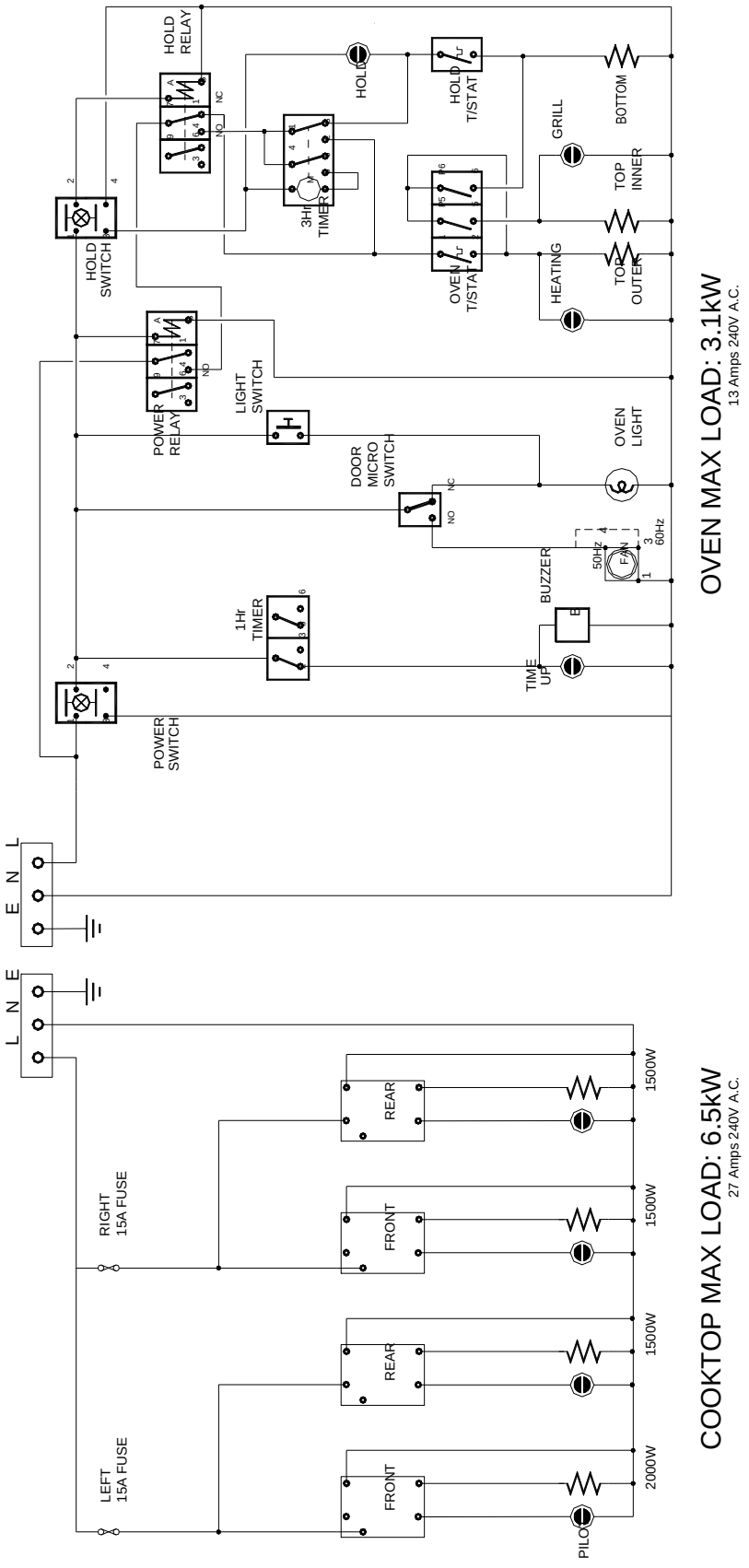
7. ELECTRICAL CIRCUIT SCHEMATICS

From Serial Number 232054



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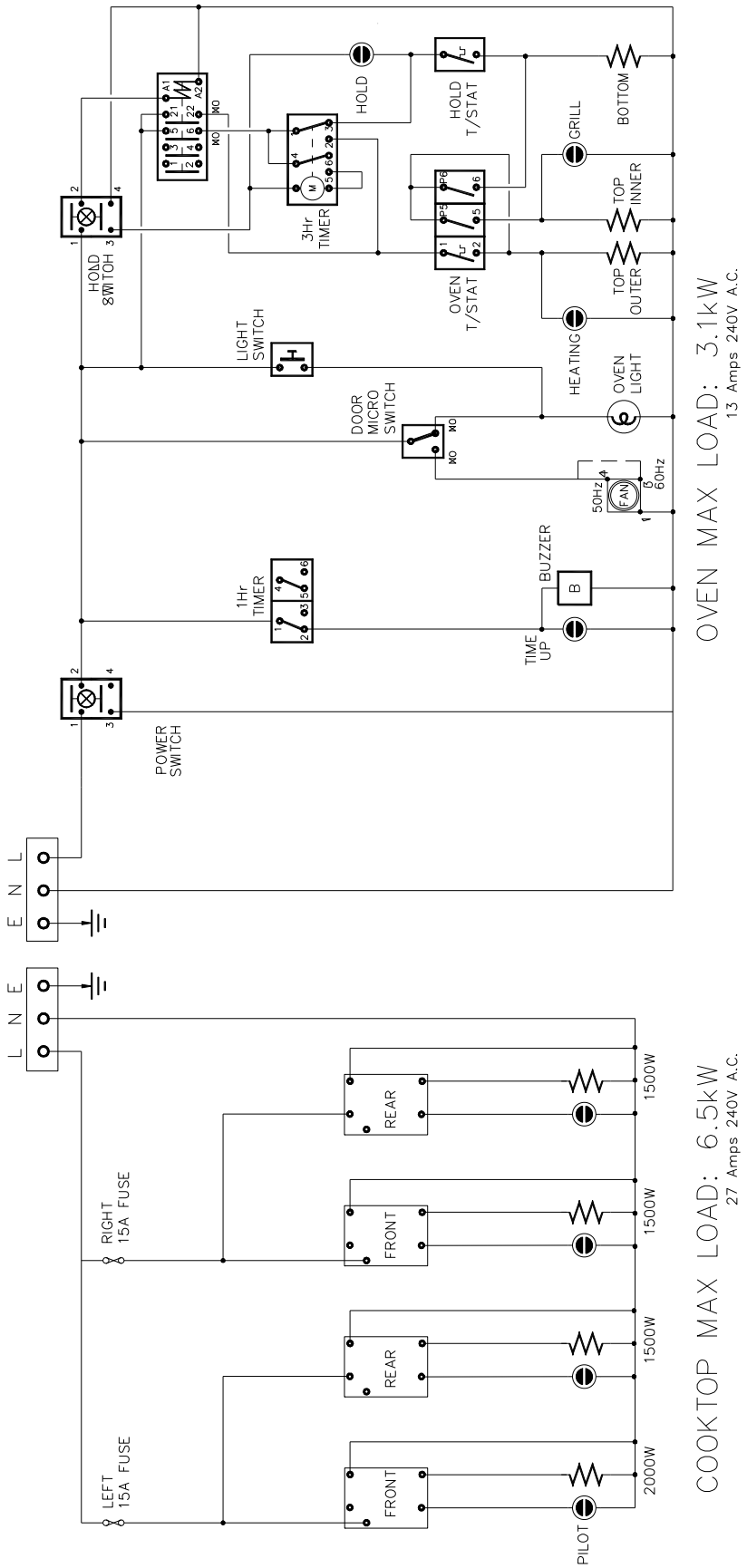
To Serial Number 232053



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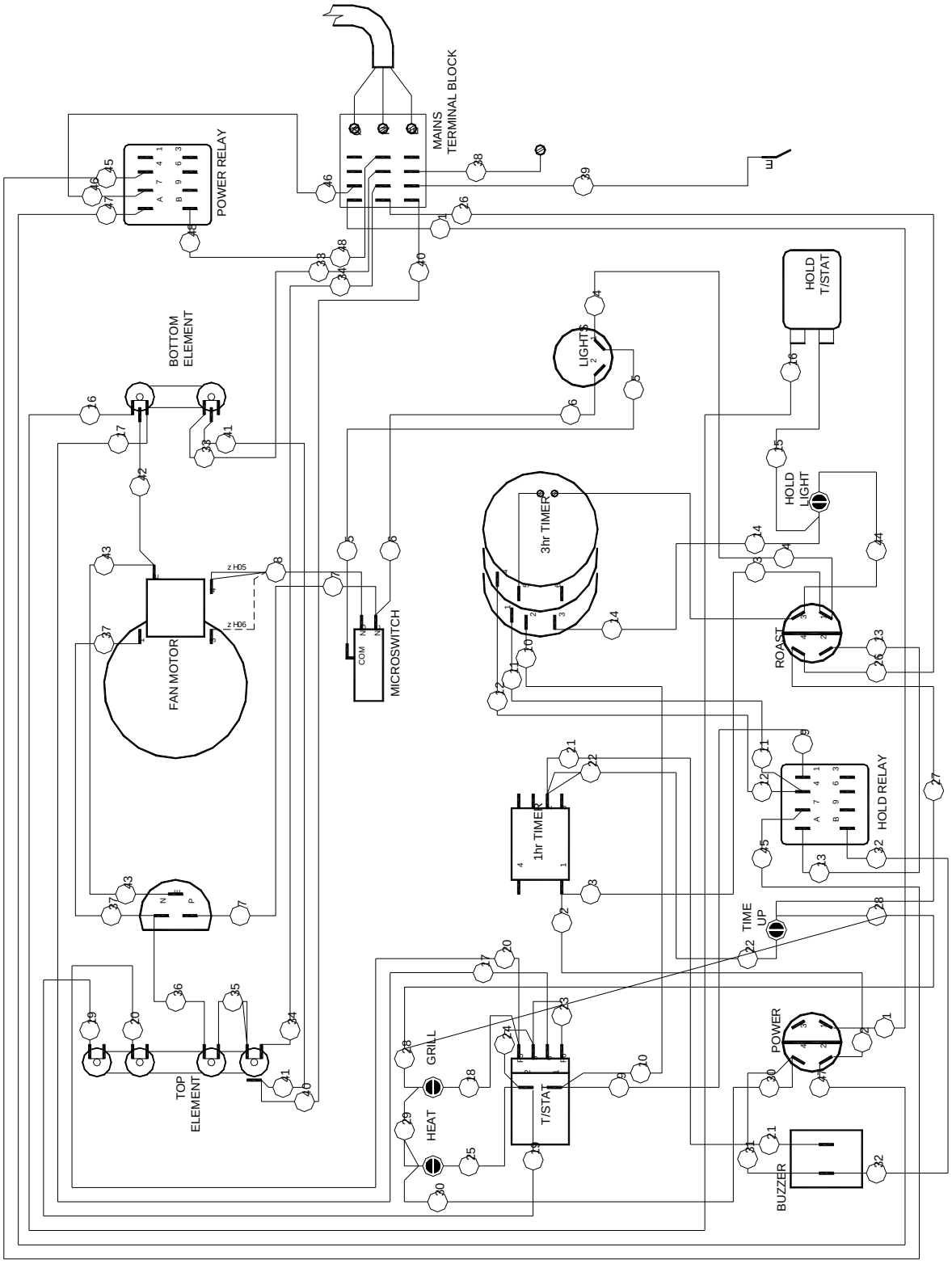
8. ELECTRICAL WIRING DIAGRAMS

8.1 OVEN

From Serial Number 232054



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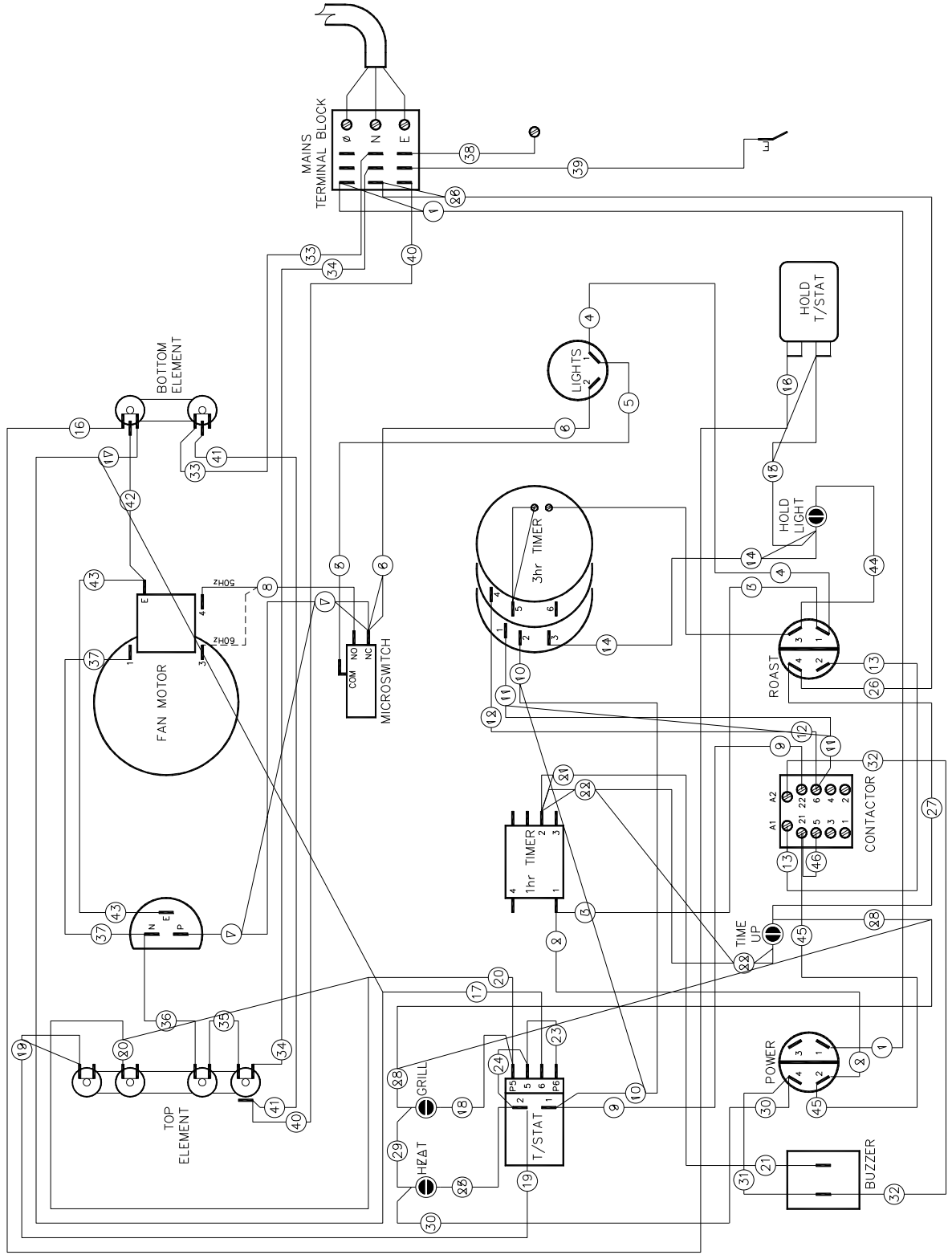
To Serial Number 232053



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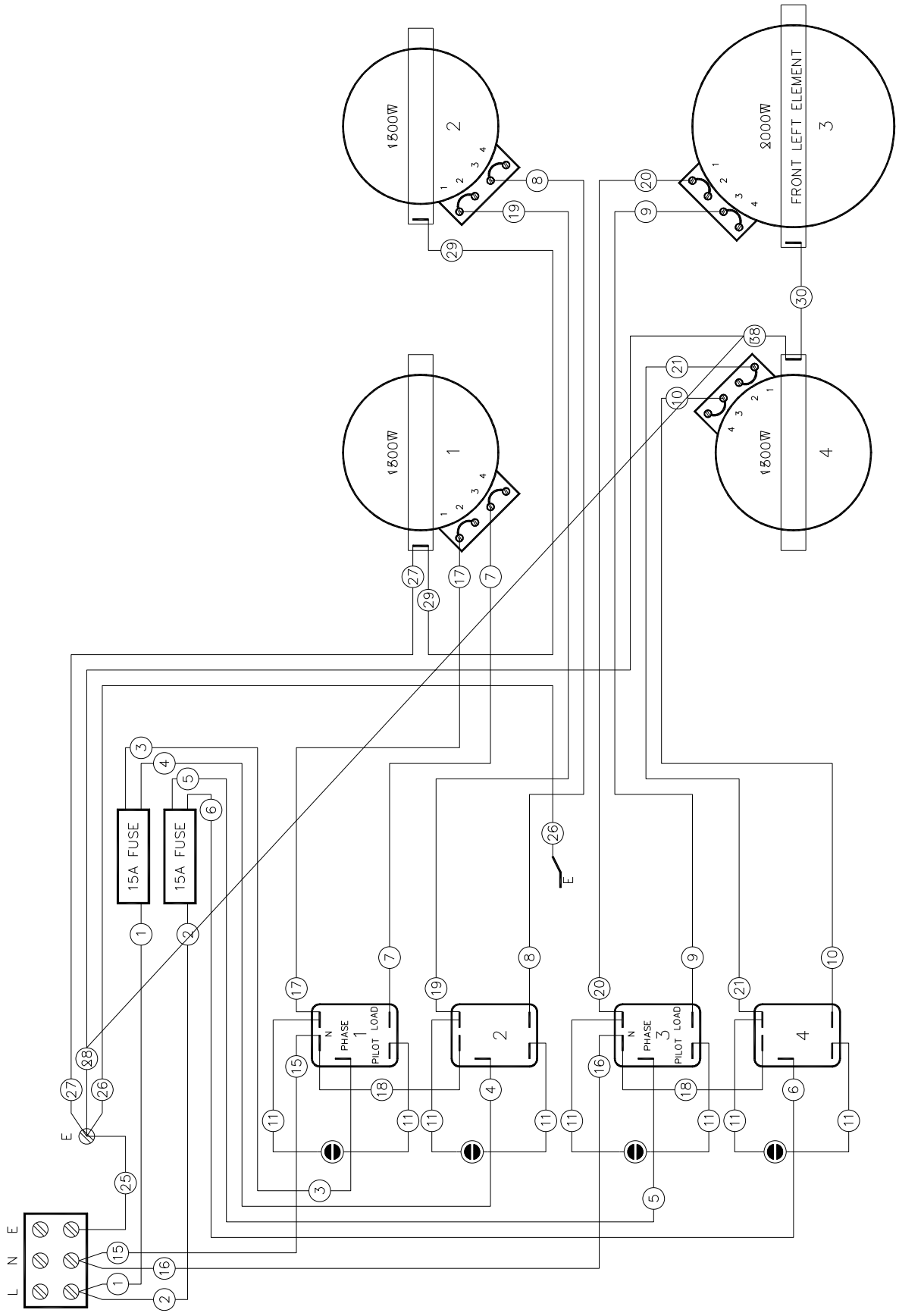
8.2 COOK TOP (HOB)



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9. SPARE PARTS

PART NO	DESCRIPTION
HOB	
002888	Element Dia 160mm (1500W)
002920	Element Dia 180mm (2000W)
003056	Energy Regulator
002754	Indicator Light
003047	Knob
003049	Knob Clip
002621	Fuse Holder—15 Amp
CONTROLS—OVEN	
021473	Switch - Power
024562	Power Relay (From S/N 232054)
024563	Power Relay Upgrade Kit (To S/N 232053)
017121	Thermostat
020823	Knob - Thermostat / Bake Timer
020849	Neon Indicator
011760	Bake Timer
011794	Buzzer
021476	Switch - 'Roast n Hold'
011419	'Roast n Hold' Timer
021472	'Roast n Hold' Timer Knob
021474	Switch - Light
024562	Hold Relay (From S/N 232054)
022281	Hold Mini Contactor (To S/N 232053)
018223	Hold Thermostat
002990	Microswitch
003002	Oven Lamp Glass
003434	Silk Gasket
013521	Oven Lamp - 40W Miniature Edison Screw
MOTOR & ELEMENTS	
003113	Oven Top Element 208 Volts
003114	Oven Bottom Element 208 Volts
011604	Oven Top Element 240 Volts
003074	Oven Bottom Element 240 Volts
013431K	Fan Motor
013432	Oven Fan
DOOR	
014225	Oven Door Seal Strip Side
023257	Oven Door Seal Strip Top / Bottom
021469	Handle Assembly
021468	Handle
021465	Handle Bracket
023264	Door Outer Glass
023263	Door Inner Glass
011005	Door Catch
013610	Door Bush
RACKS	
023255	Oven Side Rack LH
023256	Oven Side Rack RH
023254	Oven Rack
004874	Bottom Element Guard
004595	Fan Baffle

10. ACCESSORIES

OVEN RACKS (PART NO 23254)

SCONE TRAYS (PART NO 02083)

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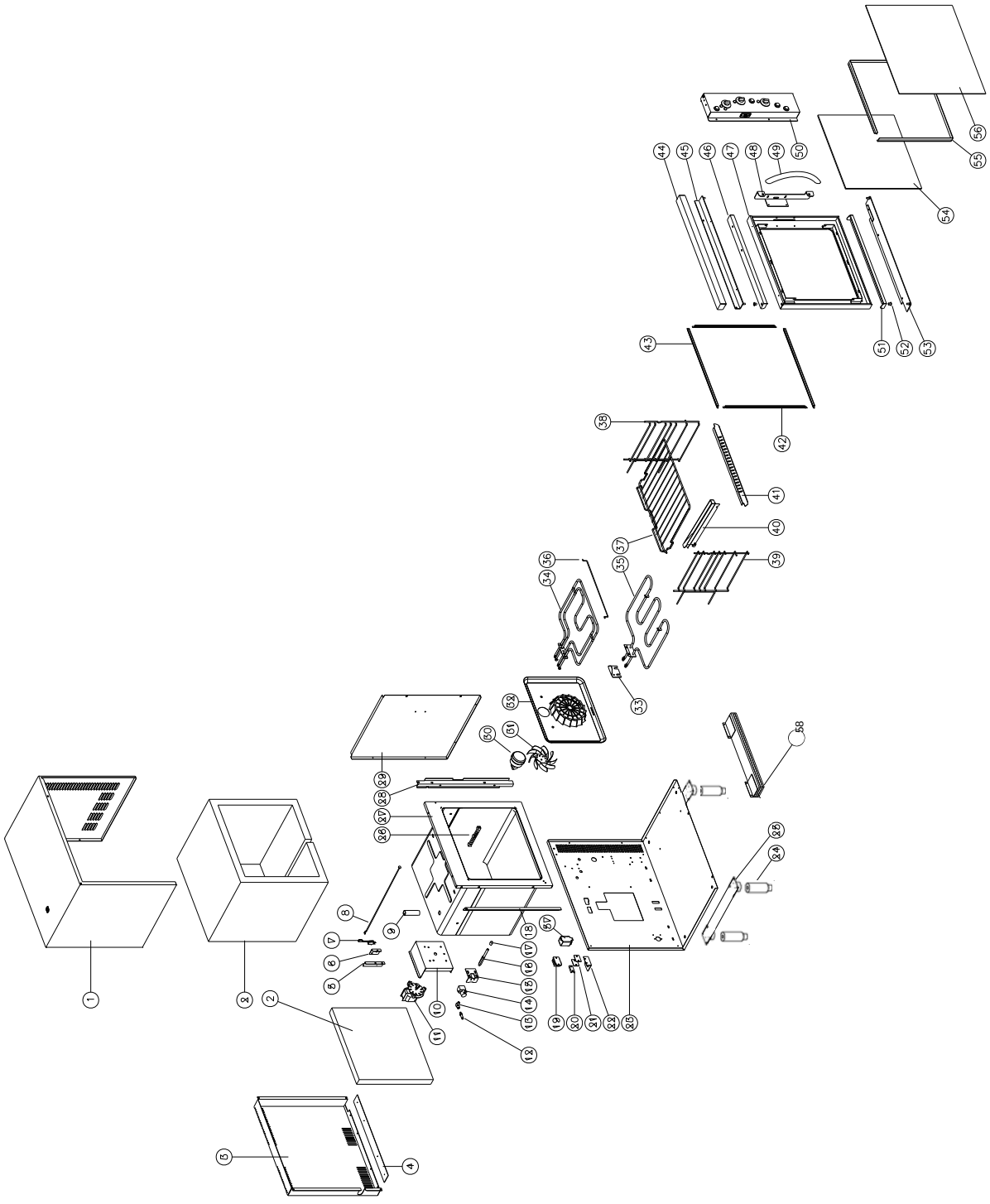
11. PARTS DIAGRAMS

11.1 OVEN MAIN ASSEMBLY



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Pos	Part No.	Description
1	023242	WRAPPER
2	090414	INSULATION
3	023276	COVER PANEL
4	023277	COVER PANEL PLATE
5	011412	MICROSWITCH BRACKET
6	011389	MICROSWITCH INSULATOR
7	002990	MICROSWITCH
8	003012	ACTUATOR ROD
	011410	MICROSWITCH BUTTON (NOT ILLUSTRATED)
9	023275	VENT TUBE
10	003016	MOTOR MOUNTING PLATE
11	013431K	MOTOR
12	012782	HOSE CONNECTOR **(US/CAN ONLY)**
13	011634	ELBOW **(US/CAN ONLY)**
14	012781	SOLENOID VALVE **(US/CAN ONLY)**
15	019208	SOLENOID MOUNTING BRACKET **(US/CAN ONLY)**
16	012784	SOLENOID EXTENSION **(US/CAN ONLY)**
17	012785	INJECTOR **(US/CAN ONLY)**
18	011404	L.H OVEN SUPPORT
19	013586	TERMINAL BLOCK
20	002138	CABLE CLAMP
21	002441	INSULATOR
22	018251	CABLE ENTRY CLAMP BRACKET
23	023241	BODY
24	017788	LEG - 6" **(150 mm)**
25	004879	FOOT PLATE
26	017770	PHIAL GUARD
27	004870	OVEN INNER
28	011413	R.H OVEN SUPPORT
29	011407	SIDE INSULATION PANEL
30	013520	OVEN LIGHT ASSEMBLY
	003434	SILK GASKET
	013521	LAMP 40W
	003002	LIGHT GLASS
31	013432	FAN
32	004595	FAN BAFFLE
33	003123	BAFFLE BRACKET
34	003113	TOP ELEMENT 208 - 220V
	011604	TOP ELEMENT 230 - 240V
35	003074	BOTTOM ELEMENT 230 - 240V
	003114	BOTTOM ELEMENT 208 - 220V
36	003219	ELEMENT SUPPORT
37	023254	OVEN RACK
38	023256	OVEN SIDE RACK - RH
39	023255	OVEN SIDE RACK - LH
40	012787	WATER TROUGH **(US/CAN ONLY)**
41	004874	BOTTOM ELEMENT GUARD
42	014225	OVEN SEAL ASSEMBLY - VERTICAL
	003028	VERTICAL SEAL - 455mm
43	023257	OVEN SEAL ASSEMBLY - HORIZONTAL
	023278	HORIZONTAL SEAL - 584mm
44	004877	PIVOT COVER - TOP
45	023243	PIVOT SUPPORT - TOP ASSEMBLY
46	023615	TOP TRIM
47	004875	DOOR INNER
48	021465	HANDLE BRACKET **(HANDLE ASSEMBLY 021469)**
49	021468	HANDLE **(HANDLE ASSEMBLY 021469)**

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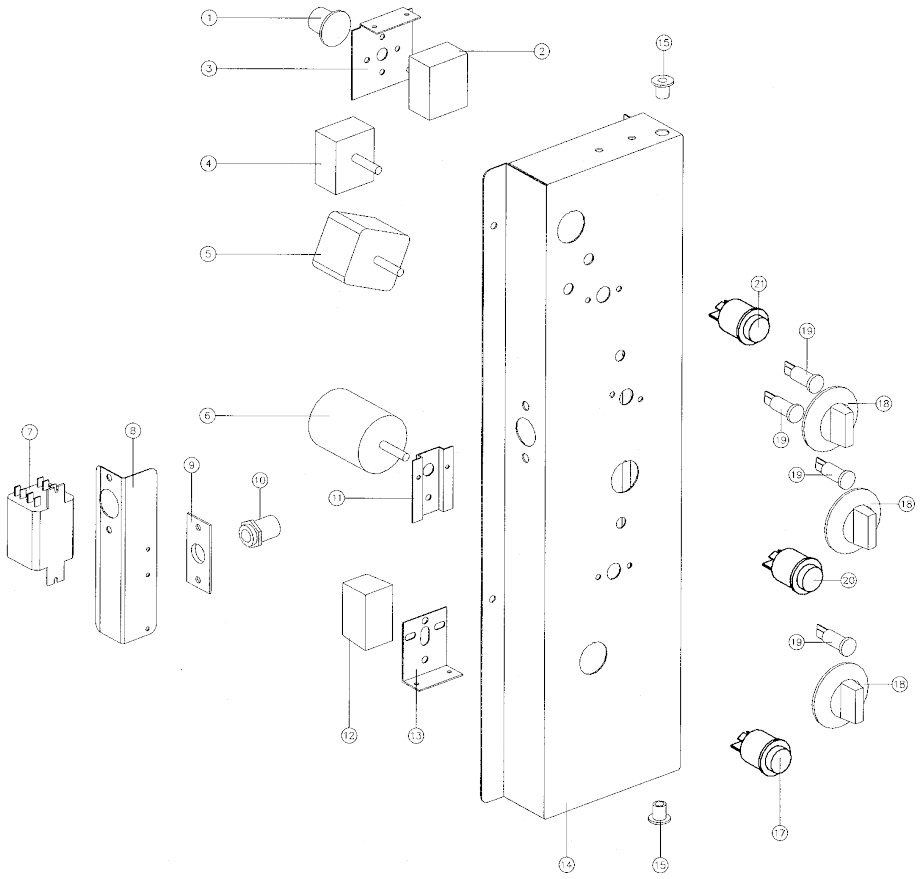
50 ---------- CONTROL ASSEMBLY **(SEE SECTION 11.2)**
51 023616 BOTTOM TRIM
52 013610 DOOR BUSH **(ALSO USED ON CONTROL PANEL PIVOT)**
53 023245 PIVOT SUPPORT - BOTTOM ASSEMBLY
54 023263 DOOR INNER GLASS
090200 SILICON EXTRUSION - 1.90M
55 004876 DOOR GLASS CLAMP ANGLE
56 023264 DOOR OUTER GLASS
090225 SILICON EXTRUSION - 0.96M
57 024562 POWER RELAY (FROM SERIAL NUMBER 232054)
024563 POWER RELAY UPGRADE KIT (TO SERIAL NUMBER 232053)
58 004594 COUNTERWEIGHT **(UK ONLY)**

11.2 OVEN CONTROL PANEL ASSEMBLY



Pos	Part No.	Description
1	018224	HOLD THERMOSTAT KNOB
2	018223	HOLD THERMOSTAT
3	021538	HOLD THERMOSTAT BRACKET **(AFFIX 018209 LABEL)**
4	017121	THERMOSTAT 50-300 ºC
5	011760	TIMER - 1 Hr
6	011419	TIMER - 3 Hr **(240V 50 Hz)**
	011983	TIMER - 3 Hr **(240V 60 Hz)**
7	024562	HOLD RELAY (FROM SERIAL NUMBER 232054)
	022281	HOLD MINI-CONTACTOR (TO SERIAL NUMBER 232053)
8	021536	RELAY / CONTACTOR BRACKET
9	018789	BALL CATCH PLATE
10	011005	BALL CATCH & LOCKNUT
11	021442	TIMER MOUNTING PANEL
12	011794	BUZZER
13	021537	BUZZER MOUNTING BRACKET
14	004873	CONTROL PANEL BAKBAR °C
	004872	CONTROL PANEL BLUE SEAL °C
	004729	CONTROL PANEL MOFFAT °F
15	013610	DOOR BUSH
17	021474	LIGHT SWITCH
18	020823	THERMOSTAT / TIMER KNOBS
19	020849	INDICATOR LIGHT
20	021476	ROAST 'N' HOLD SWITCH
21	021473	POWER SWITCH

11. SERVICE CONTACTS

AUSTRALIA

VICTORIA - MOFFAT PTY
HEAD OFFICE AND MAIN WAREHOUSE
740 Springvale Road
Mulgrave VIC 3170
Spare Parts Department
Tel (03) 9518 3888
Fax (03) 9518 3838
Free Call 1800 337 963
Fax (03) 9518 3895

NEW SOUTH WALES - MOFFAT PTY
Unit 8/142 James Ruse Drive
Rosehill NSW 2142
Spare Parts
Free Call 1800 337 963
Fax (03) 9518 3895

QUEENSLAND - MOFFAT PTY
30 Prosperity Place
Geebung QLD 4034
Spare Parts
Free Call 1800 337 963
Fax (03) 9518 3895

SOUTH AUSTRALIA - MOFFAT PTY
Suite 8/71 Fullarton Rd
Kent Town SA 5067
Tel (08) 8431 0522
Spare Parts
Free Call 1800 337 963

WESTERN AUSTRALIA - MOFFAT PTY
PO Box 689
Joondalup Business Centre WA 6027
Tel (08) 9305 8855
Spare Parts
Free Call 1800 337 963

NATIONAL COVERAGE FOR 24 HOUR SERVICE OR MAINTENANCE DIAL FREE CALL 1800 622 216 (AUSTRALIA ONLY)

CANADA

Lessard Agencies Limited
PO Box 97
Stn "D"
Toronto, ONT M6P 3J5
Tel (416) 766 2764
Fax (416) 760 0394
Free Call 1 888 537 7273

NEW ZEALAND

CHRISTCHURCH - MOFFAT LTD
16 Osborne St
PO Box 10-001
Christchurch
Free Call 0800 Moffat (0800 663 328)
Spare Parts
Tel (03) 389 1007
Fax (03) 389 1276

AUCKLAND - MOFFAT LTD
4 Waipuna Road
Mt Wellington
Auckland
Tel (09) 574 3150
Fax (09) 574 3159
Spare Parts
Free Call 0800 Moffat (0800 663 328)

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UNITED KINGDOM

BLUESEAL LTD
Units 6-7 Mount St
Business Park
Birmingham B7 5QU
England

Tel 0121-327 5575
Fax 0121-327 9711

UNITED STATES OF AMERICA

MOFFAT INC.
3765 Champion Blvd
Winston-Salem
NC27115

Tel 1-800-551 8795
Fax 336 661 9546

NATIONAL COVERAGE FOR SERVICE OR MAINTENANCE DIAL
FREE CALL 1800 551 8795 (USA ONLY)

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APPENDIX A. POWER RELAY UPGRADE KIT

Kit (part no. 024563) includes:

1	x	Power relay
2	x	Screw - 8 x $^{3}/_{8}$ truss
1	x	160mm black wire
1	x	180mm red wire
1	x	950mm red wire
1	x	1050mm red wire

Assembly Instructions: (THE ELECTRICAL SUPPLY MUST BE DISCONNECTED)

1) Remove the rear service panel.

2) Mark and drill 2x ø3.5mm holes as per figure 1.

3) Mount relay to holes with 2 screws provided.
(**NOTE:** Terminals on relay must face upwards).

4) Connect 160mm black wire to vacant neutral (L2) terminal on terminal block and to terminal B on relay.

5) Connect short (180mm) red wire to vacant phase (L1) terminal on terminal block and to terminal 7 on relay.

6) Connect long thick red wire (950mm) to power relay terminal 4 and remaining long thin wire (1050mm) to relay terminal A. Feed these wires through the plastic bush in the rear of the oven and into the control cavity.

7) Loosen screws and open the control panel.

8) Remove and discard wire from terminal 2 on the power switch to terminal 21 on the mini contactor inside the control panel.
Locate end of thick red wire previously fed into control cavity and connect to terminal 21 of the contactor.

9) Locate long thin red wire and connect to terminal 2 on the power switch.

10) Close and fasten control panel taking care not to trap any wires.

11) Replace and fasten rear service panel.

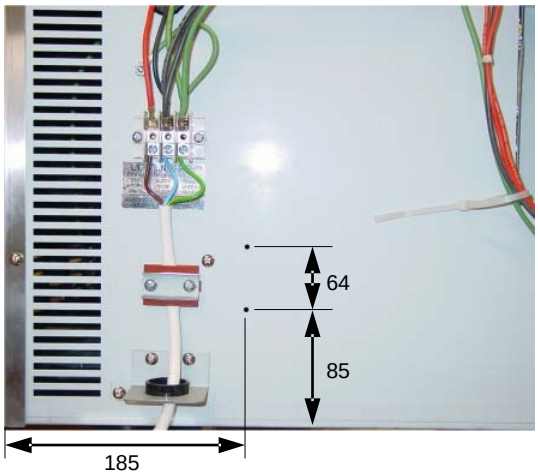

Figure 1

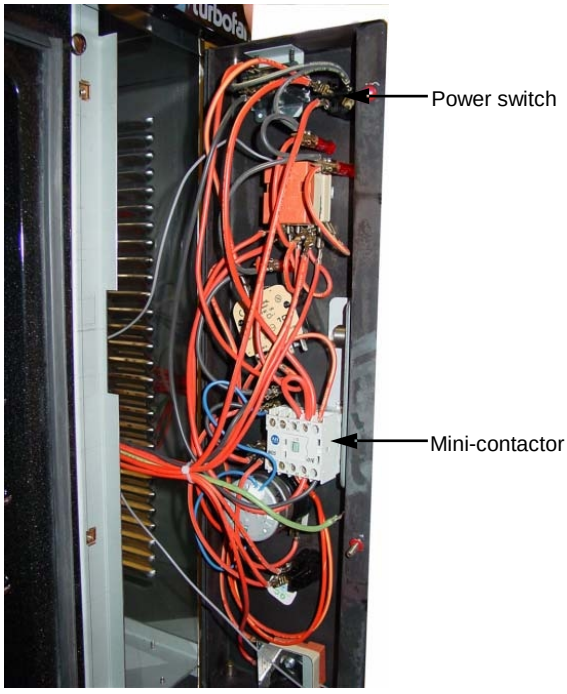

Figure 2

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Circuit schematic (new wires shown in bold):

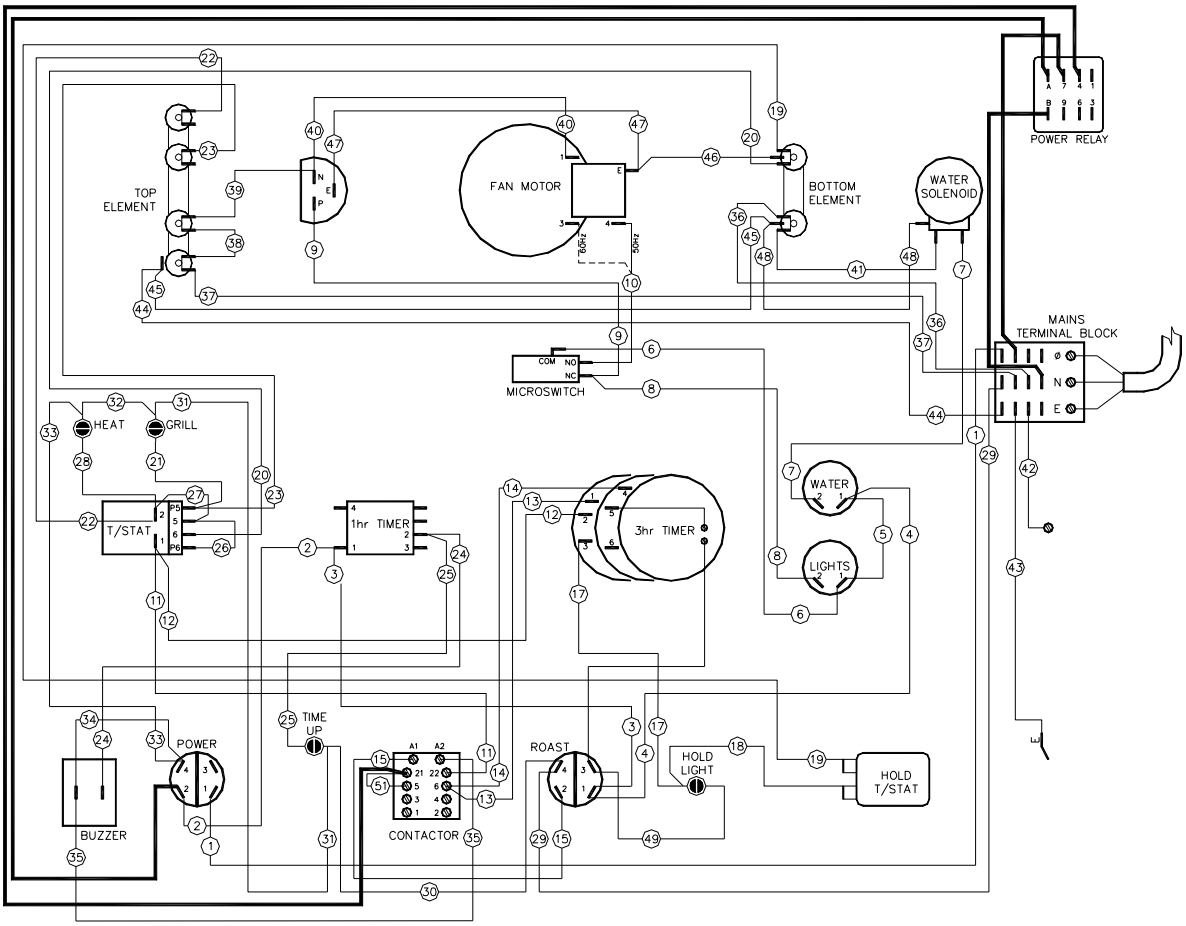

Figure 3

Utensils Direct
0845 873 6600
www.utensilsdirect.co.uk